

## FA-18A/C/D PILOT AND WSO

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**\* \* NOTE \* \***

AIRCREW COORDINATION AND OPERATIONAL RISK MANAGEMENT (ORM) FACTORS  
SHALL BE BRIEFED ON ALL FLIGHTS AND/OR EVENTS.

100. MARINE FIGHTER ATTACK SQUADRON (FA-18A/C) UNIT TEMPLATE, MISSION STATEMENT, UNIT CORE CAPABILITY, UNIT CORE COMPETENCY

NOTE

The capabilities defined and described in the core capability and unit template sections are provided to ensure each like-squadron maintains a common base of training and depth of capabilities. When resources permit, and when in the judgment of the commander additional training would significantly increase the unit's war fighting capability, training to a level above these base capabilities is permitted. It is incumbent upon and expected of the commander to balance any increase in the depth of core capabilities against the long-term health and readiness of his unit while staying within his resource constraints.

1. VMFA Mission. Destroy surface targets and enemy aircraft, day or night under all weather conditions during expeditionary, joint or combined operations.

2. Mission Essential Task List (METL)

- a. Conduct Offensive Air Support
- b. Conduct Anti-Air Warfare
- c. Conduct Assault Support Escort
- d. Operate from an Aircraft Carrier or Expeditionary Airfield

3. Table of Organization. T/O for an FA-18A/C Squadron is 19 pilots and 12 aircraft.

4. VMFA Unit Core Capability

a. Core Capable Unit. A Core Capable squadron is able to surge and sustain the following minimum performance on a daily basis during contingency/combat operations, assuming 100% PAA,  $\geq 90\%$  in reporting status and  $\geq 90\%$  T/O on hand in all MOSS. The extent to which a Core Capable squadron is able to surge is based upon the MCCRES surge rate formula and a one hour sortie duration.

b. During a 24 hour period, a Core Capable squadron is able to conduct surge operations generating a minimum of 33 sorties or sustained operations generating a minimum of 22 sorties in a combination of OAS, AAW and AS missions, day or night.

5. VMFA Unit Core Skills. Unit Core Skills are depicted in the following matrix and directly support the Unit METL. Core and Core Plus skills shall be a determining factor in developing T&R training requirements.

METL	FA-18A/C CORE SKILL											CORE PLUS
	BAS	AI	AR	CAS	TRXN	BFM	ACM	NS(H)	LAT	AAR	FCLP	NS(L)
Conduct OAS	X	X	X	X	X			X	X	X		X
Conduct AAW					X	X	X	X		X		
Conduct AS	X	X	X	X	X	X	X	X	X	X		
Operate from CV/EAF										X	X	

6. VMFA Unit Core Competency.

a. Unit Core Competency is based on a combination of core skill competency and flight leader/instructor designations and is defined by paragraph (1) and (2) below.

(1) Unit Core Skill Requirements. As a minimum, in order to be considered Core Skill Competent, a unit must possess the following numbers of aircrew who are competent in each core skill. In order to be considered competent in a core skill, an individual must attain and maintain competency in the core skill events, as delineated in paragraphs 7 and 8 below.

FA-18A/C	
CORE SKILL *CORE PLUS	SQDN TOTAL 19 PILOTS/12 ACFT
BAS	12
AI	12
AR	12
CAS	12
TRXN	12
BFM	12
ACM	12
NS(H)	12
LAT	12
AAR	12
FCLP	12
*NS(L)	*8

(2) Unit Flight Leader/Instructor Requirements. As a minimum, in order to be considered Core Competent, a unit must possess the following numbers of aircrew with the listed Flight Lead Qualifications and Instructor Designations. The listed numbers are based on the unit core capability definition.

FA-18A/C	
FLT LD QUAL INST DESG	SQDN TOTAL (19 Pilots)
MSN CMDR	4
DIV LDR	6
SEC LDR	8
LATI	2
NSI	3
ACTI	4
WTI	2
LSO	2
MDTC/TOPGUN	2

7. Sorties Required to Attain Individual Core Skill Competency. To attain competency in a core skill, an individual must successfully complete the events listed in the chart below for that core skill.

FA-18A/C	BAS	AI	AR	CAS	TRXN	BFM	ACM	NS(H)	LAT	AAR	FCLP	NS(L)
T&R CODES to attain competency	220*	270	260	250	202	230*	240	209	204*	200	290	410
	221	271	261*	251*	203	231	241*	210	205*	201	291	411
	222*	272*	262	252		232	242	211*	206		292	412E
	223		360*	350		233*	243*	212	207			
	224			352*		234	244*	213*	208E*			
	225					235	245E	214E				
	226					236*	331*					
	227*						333*					
	228E						334*					
	320*											
	321*											
	322*											
-(*) Indicates sorties that shall be flown in support of the FA-18A/C refresher syllabus. -Shaded columns represent core plus skills.												

8. Sorties Required to Maintain Individual Core Skill Proficiency. Once core skill competency is attained, an individual must maintain proficiency in the core skill sorties listed in the chart below (or events that chain those sorties).

FA-18A/C	BAS	AI	AR	CAS	TRXN	BFM	ACM	LAT	AAR	FCLP	NS(L)
T&R	220	270	260	250	202	230	241	208E	200	291	412E
CODES	221	271	261	251	203	231	243		201	292	
to maintain	222	272	262	252		232	244				
proficiency	223		360	350		233	S331				
	224			352		234	333				
	225					235	334				
	226					236					
	227										
	228E										
	320										
	321										
	322										
-Shaded columns represent core plus skills.											

## 9. Currency and Proficiency

a. Currency. A control measure used to provide an additional margin of safety based on exposure frequency to a particular skill. It is a measure of time since the last event demanding that specific skill. Loss of currency does not affect a loss of Combat Readiness Percentage (CRP). For example, currency determines minimum altitudes in rules of conduct based upon the most recent low altitude fly date. Specific currency requirements for individual type mission profiles can be found in chapter 5 of the T&R Manual, Administrative.

b. Proficiency. A measure of achievement of a specific skill. Refly factors establish the maximum time between demonstration of those particular skills. CRP is a measurement of "demonstrated proficiency." If an aircrew exceeds the refly factor for a particular event, the individual loses CRP for that particular event. To regain proficiency, an individual shall complete the delinquent event with a proficient crewman/flight lead. If an entire unit loses proficiency, unit instructors shall regain proficiency by completing an event with instructors from a like unit. If not feasible, the instructor shall regain proficiency by completing the event with another instructor. If a unit has only one instructor and cannot complete the event with an instructor from another unit, he shall regain proficiency with another aircraft commander or as designated by his commanding officer.

## 10. Qualifications And Designations

a. Qualification. A status assigned to personnel based on demonstration of proficiency in a specific skill. Specific criteria to achieve qualifications are delineated in the following tables. Upon successful completion of qualification criteria, commanding officers may issue an appropriate qualification letter for inclusion in the NATOPS jacket and APR/MPR. Aircrew do not lose a qualification as a function of refly factor for individual events. Loss of proficiency (delinquent refly factor) for all associated qualification core skill events constitutes loss of that qualification. Re-qualification requires demonstration of proficiency in the "R" coded events listed in the following tables.

b. Designation. A status assigned to an individual based on leadership ability. A designation is a command specific, one-time occurrence and

remains in effect until removed for cause. Specific designation requirements are delineated in the following tables. Commanders shall issue a designation letter to the individual upon the occasion of original designation, with appropriate copies for inclusion in the NATOPS jacket and APR/MPR.

c. Qualifications And Designations Tables. These tables serve to delineate the events required for initial and re-qualification of all qualifications and designations. All stage lectures, briefs, squadron training and prerequisites shall be complete prior to completing final events. Qualification and designation letters signed by the commanding officer shall be placed in the NATOPS and APR jackets. Loss of proficiency for all associated core skill events causes the associated qualification to be lost. Regaining the qualification requires a demonstration of proficiency through the "R" coded syllabus. The commanding officer may tailor a syllabus based on the experience of the aircrew.

<u>Qualification</u>	<u>Initial Event Qualification Requirements</u>
FA-18A/C (TRACKING CODE)	All qualifications require a letter signed by the commanding officer to be placed in the NATOPS and APR. <b><u>Requalification:</u></b> A pilot shall fly all associated qualification "R" coded events. Modification to this standard is at the discretion of the commanding officer.
NATOPS (600E)	IAW OPNAV 3710.7 and an annual qualification letter signed by the commanding officer.
Instrument (601E)	IAW OPNAV 3710.7 and an annual qualification letter signed by the commanding officer.
LAT QUAL (610E)	S204(R), 205(R), 206, 207, 208E(R)
DAY CQ (613E)	613E(R)
NIGHT CQ (614E)	614E(R)
ACM QUAL (616E)	S230(R), S231, 230, 231, 232, 233(R), 234, 235, 236(R), S240, S241(R), 242, 243(R), 244(R), 245E
NS QUAL (HI) (621E)	S209, 210, 211(R), 212, 213(R), 214E
NS QUAL (LO) (622E)	410, 411, 412E

<u>Designation</u>	<u>Designation Requirements</u>
FA-18A/C (TRACKING CODE)	All designations require a letter signed by the commanding officer to be placed in the pilot's NATOPS jacket and APR.
PMCF (631E)	IAW OPNAV 3710.7 and an annual designation letter signed by the commanding officer.
SECTION LEAD (649E)	640E, 641E, 642E, 643E, 644E, 645E, 646E, 647E, 648E, 649E(R). The IUT shall be complete with all 200 and 300 level sorties prior to beginning section lead workup.
DIVISION LEAD (659E)	650E, 651E, 652E, 653E, 659E(R).
MISSION COMMANDER (679E)	670E, 671E, 679E(R).
LAT(I) (681E)	IAW the MAWTS-1 Course Catalog.
ACT(I) (688E)	
TOPGUN (696)	
MDTC (697)	
NS(I) (698E)	
WTI (699)	



# FA-18A/C CORE PROGRESSION MODEL

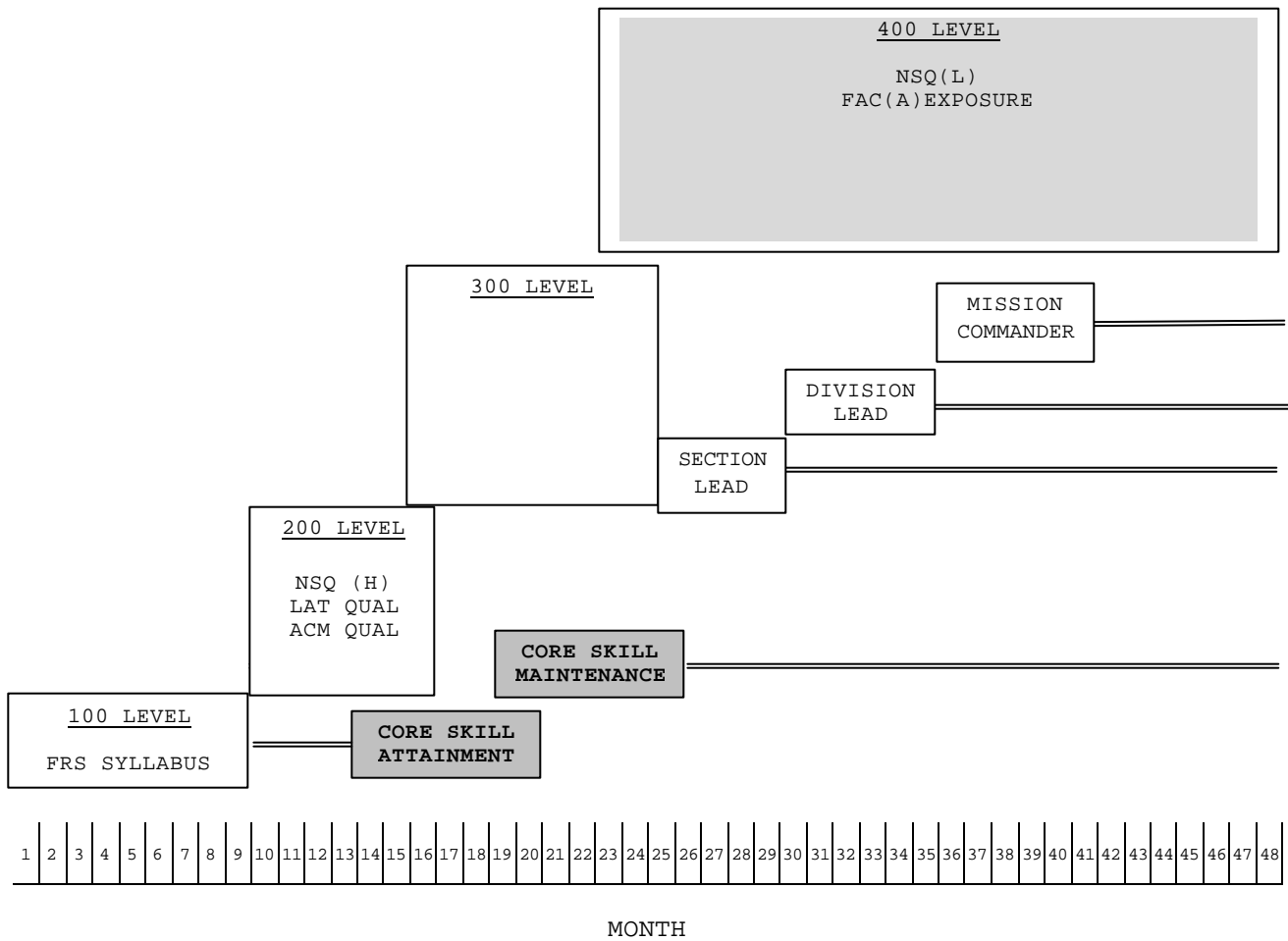


Figure (1) FA-18A/C CORE PROGRESSION MODEL

101. MARINE FIGHTER ATTACK SQUADRON (ALL WEATHER)(FA-18D) UNIT TEMPLATE, MISSION STATEMENT, UNIT CORE CAPABILITY, UNIT CORE COMPETENCY

NOTE

The capabilities defined and described in the core capability and unit template sections are provided to ensure each like-squadron maintains a common base of training and depth of capabilities. When resources permit, and when in the judgment of the commander additional training would significantly increase the unit's war fighting capability, training to a level above these base capabilities is permitted. It is incumbent upon and expected of the commander to balance any increase in the depth of core capabilities against the long-term health and readiness of his unit while staying within his resource constraints.

1. VMFA(AW)Mission. Destroy surface targets and enemy aircraft, conduct multi-sensor imagery reconnaissance and provide supporting arms coordination day or night under all weather conditions during expeditionary, joint, or combined operations.

2. Mission Essential Task List (METL)

- a. Conduct Offensive Air Support
- b. Conduct Anti-Air Warfare
- c. Conduct Assault Support Escort
- d. Conduct Aerial Reconnaissance
- e. Conduct Combined Arms Coordination and Control
- f. Operate from an Expeditionary Airfield

3. Table of Organization. T/O for an FA-18D Squadron is 19 pilots and 19 WSOs and 12 aircraft.

4. VMFA(AW) Unit Core Capability

a. A Core Capable squadron is able to surge and sustain the following minimum performance on a daily basis during contingency/combat operations, assuming 100% PAA,  $\geq 90\%$  in reporting status and  $\geq 90\%$  T/O on hand in all MOSS. The extent to which a Core Capable squadron is able to surge is based upon the MCCRES surge rate formula.

b. During a 24 hour period, a Core Capable squadron is able to conduct surge operations generating a minimum of 33 sorties or sustained operations generating a minimum of 22 sorties in a combination of OAS, AAW, Aerial Reconnaissance and AS missions, day or night missions, or 10 sections in a FAC(A) role.

5. VMFA(AW)Unit Core Skills. Unit Core Skills are depicted in the following matrix and directly support the Unit METL. Core and Core Plus skills shall be a determining factor in developing T&R training requirements.

M E T L	FA-18D CORE SKILL														CORE PLUS
	BAS	AI	AR	CAS	TRXN	B F M	ACM	NS(H)	LAT	A A R	FCLP	TAR	FAC(A)	TAC(A)	NS(L)
Conduct OAS	X	X	X	X	X			X	X	X		X			X
Conduct AAW					X	X	X	X		X					
Conduct AS	X	X	X	X	X	X	X	X	X	X					
Conduct Air Recce					X		X	X	X	X		X			X
Conduct CACC	X		X	X	X		X	X	X	X			X	X	X
Operate from EAF										X	X				

#### 6. VMFA(AW) Unit Core Competency.

a. Unit Core Competency is based on a combination of core skill competency and flight leader/instructor designations and is defined by paragraph (1) and (2) below.

(1) Unit Core Skill Requirements. As a minimum, in order to be considered Core Skill Competent, a unit must possess the following numbers of both pilot's and WSOs who are competent in each core skill. In order to be considered competent in a core skill, an individual must attain and maintain competency in the core skill events, as delineated in paragraphs 7 and 8 below.

FA-18D	
CORE SKILL *CORE PLUS	SQDN TOTAL 19 PILOTS/WSOs 12 ACFT
BAS	12/12
AI	12/12
AR	12/12
CAS	12/12
TRXN	12/12
BFM	8/8
ACM	8/8
NS(H)	12/12
LAT	12/12
AAR	12/12
FCLP	12/12
TAR	8/8
FAC(A)	8/8
TAC(A)	2/2
*NS(L)	*8/8

(2) Unit Flight Leader/Instructor Requirements. As a minimum, in order to be considered Core Competent, a unit must possess the following numbers of aircrew with the listed Flight Lead Qualifications and Instructor designations. The listed numbers are based on the unit core capability definition.

FLT LD/INST DESIGNATION	SQDN TOTAL (19 Pilots)	SQDN TOTAL (19 WSOs)
MSN CMDR	4	4
DIV LDR	6	NA
SEC LDR	8	NA
LATI	2	NA
NSI	3	3
ACTI	3	3
FAC(A)I	3	3
TAC(A)I	1	
WTI	2	2
LSO	2	NA
MDTC/TOPGUN	1	1

7. Sorties Required to Attain Individual Core Skill Competency. To attain competency in a core skill, an individual must successfully complete the events listed in the chart below for that core skill.

FA-18D	BAS	AI	AR	CAS	TRXN	BFM	ACM	NS(H)	LAT	AAR	FCLP	TAR	TAC(A)	FAC(A)	NS(L)
T&R	220*	270	260	250	202	230*	240	209	204*	200	290	280	390	380	410
CODES	221	271	261*	251*	203	231	241*	210	205*	201	291	281	391E	381*	411
to attain	222*	272*	262	252		232	242	211*	206		292	282		382*	412E*
competency	223		360*	350		233*	243*	212	207					383	
	224			352*		234	244*	213*	208E*					384	
	225					235	245E	214E						385*	
	226					236*	331*							386	
	227*						333*							387E	
	228E						334*								
	320*														
	321*														
	322*														
-(*) Indicates sorties that shall be flown in support of the FA-18D refresher syllabus. -Shaded column represents core plus skills.															

8. Sorties Required to Maintain Individual Core Skill Proficiency. Once core skill competency is attained an individual must maintain proficiency in the core skill events listed in the chart below (or events that chain those events).

FA-18D	BAS	AI	AR	CAS	TRXN	BFM	ACM	LAT	AAR	FCLP	TAR	TAC(A)	FAC(A)	NS(L)
T&R	220	270	260	250	202	230	241	208E	200	291	280	390	380	412E
CODES	221	271	261	251	203	231	243		201	292	281	391E	381	
to maintain	222	272	262	252		232	244				282		382	
proficiency	223		360	350		233	331						383	
	224			352		236	333						384	
	225						334						385	
	226												386	
	227												387E	
	228E													
	320													
	321													
	322													

-Shaded column represents core plus skills.

#### 9. Currency and Proficiency

a. Currency. A control measure used to provide an additional margin of safety based on exposure frequency to a particular skill. It is a measure of time since the last event demanding that specific skill. Loss of currency does not affect a loss of Combat Readiness Percentage (CRP). For example, currency determines minimum altitudes in rules of conduct based upon the most recent low altitude fly date. Specific currency requirements for individual type mission profiles can be found in chapter 5 of the T&R Manual, Administrative.

b. Proficiency. A measure of achievement of a specific skill. Refly factors establish the maximum time between demonstration of those particular skills. CRP is a measurement of "demonstrated proficiency." If an aircrew exceeds the refly factor for a particular event, the individual loses CRP for that particular event. To regain proficiency, an individual shall complete the delinquent event with a proficient crewman/flight lead. If an entire unit loses proficiency, unit instructors shall regain proficiency by completing an event with instructors from a like unit. If not feasible, the instructor shall regain proficiency by completing the event with another instructor. If a unit has only one instructor and cannot complete the event with an instructor from another unit, he shall regain proficiency with another aircraft commander or as designated by his commanding officer.

#### 10. Qualifications And Designations

a. Qualification. A status assigned to personnel based on demonstration of proficiency in a specific skill. Specific criteria to achieve qualifications are delineated in the following tables. Upon successful completion of qualification criteria, commanding officers may issue an appropriate qualification letter for inclusion in the NATOPS jacket and APR/MPR. Aircrews do not lose a qualification as a function of refly factor for individual events. Loss of proficiency (delinquent refly factor) for all associated qualification core skill events constitutes loss of that qualification. Re-qualification requires demonstration of proficiency. Re-qualification requires demonstration of proficiency in the "R" coded events listed in the following tables.

b. Designation. A status assigned to an individual based on leadership

ability. A designation is a command specific, one-time occurrence and remains in effect until removed for cause. Specific designation requirements are delineated in the following tables. Commanders shall issue a designation letter to the individual upon the occasion of original designation, with appropriate copies for inclusion in the NATOPS jacket and APR/MPR.

c. Qualifications And Designations Tables. These tables serve to delineate the events required for initial and re-qualification of all qualifications and designations. All phase lectures, briefs, squadron training and prerequisites shall be complete prior to completing final events. Qualification and designation letters signed by the commanding officer shall be placed in the NATOPS and APR jackets. Loss of proficiency for all associated core skill events causes the associated qualification to be lost. Regaining the qualification requires a demonstration of proficiency through the "R" coded syllabus. The commanding officer may tailor a syllabus based on the experience of the individual pilot.

<u>Qualification</u>	<u>Initial Event Qualification Requirements</u>
FA-18D (TRACKING CODE)	All qualifications require a letter signed by the commanding officer to be placed in the NATOPS and APR. <b><u>Requalification:</u></b> An aircrew shall fly all associated qualification "R" coded events. Modification to this standard is at the discretion of the commanding officer.
NATOPS (600E)	IAW OPNAV 3710.7 and an annual qualification letter signed by the commanding officer.
Instrument (601E)	IAW OPNAV 3710.7 and an annual qualification letter signed by the commanding officer.
LAT QUAL (610E)	S204(R), 205(R), 206, 207, 208E(R)
DAY CQ (613E)	613E(R)
NIGHT CQ (614E)	614E(R)
ACM QUAL (616E)	S230(R), S231, 230, 231, 232, 233(R), 234, 235, 236(R), S240, S241(R), 242, 243(R), 244(R), 245E
NS QUAL (HI) (621E)	S209, 210, 211(R), 212, 213(R), 214E
NS QUAL (LO) (622E)	410, 411, 412E
FAC(A) QUAL (619E)	380, 381(R), 382(R), 383, 384, 385(R), 386, 387E
TAC(A) QUAL (623E)	390(R), 391E

<u>Designation</u>	<u>Designation Requirements</u>
FA-18D (TRACKING CODE)	All designations require a letter signed by the commanding officer to be placed in the aircrews NATOPS jacket and APR.
PMCF (631E)	IAW OPNAV 3710.7 and an annual designation letter signed by the commanding officer.
SECTION LEAD (649E)	640E, 641E, 642E, 643E, 644E, 645E, 646E, 647E, 648E, 649E(R). The IUT shall be complete with all 200 and 300 level sorties (not including FAC(A)-(380-387E) and TAC(A)-390, 391E) prior to beginning section lead workup.
DIVISION LEAD (659E)	650E, 651E, 652E, 653E, 659E(R).
MISSION COMMANDER (679E)	670E, 671E, 679E(R).
LAT(I) (681E)	IAW the MAWTS-1 Course Catalog.
ACT(I) (688E)	
TOPGUN (696)	
MDTC (697)	
NS(I) (698E)	
WTI (699)	
FAC(A)I (683E)	
TAC(A)I (689E)	

# FA-18D CORE PROGRESSION MODEL

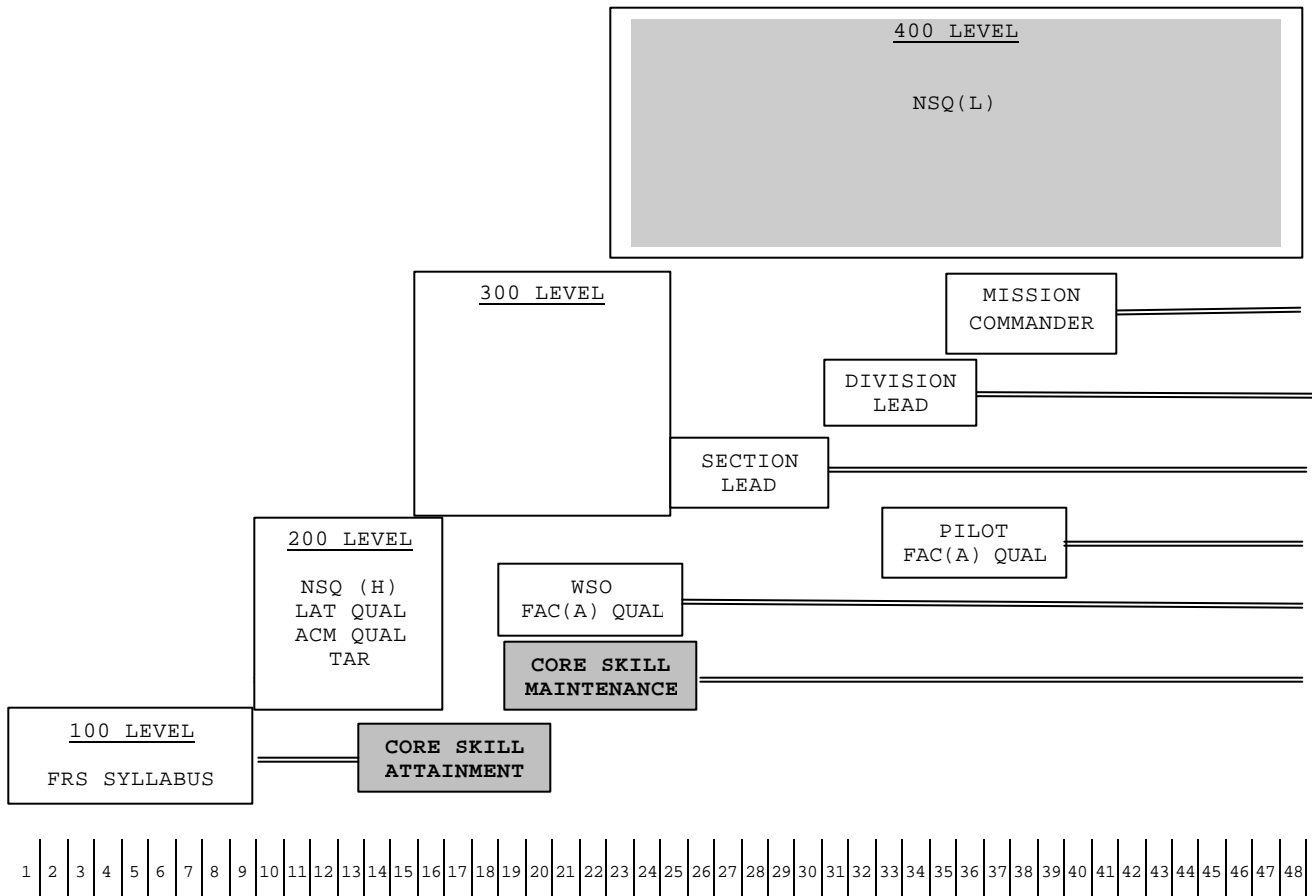


Figure (2) FA-18D CORE PROGRESSION MODEL



102. PROGRAM OF INSTRUCTION (POI) FOR BASIC/TRANSITION/CONVERSION PILOT AND WSO (CAT I/II)

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-32	100 Level Training (CAT I/II)	FRS
33-56	200 Level Training	Tactical Squadron
57-80	300 Level Training	Tactical Squadron
81-86	400 Level Training	Tactical Squadron

103. POI FOR COMPREHENSIVE REFRESHER PILOT AND WSO (CAT III). (731 days or greater since last FA-18 flight.)

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-21	100 Level Training (CAT III)	FRS
22-30	200 Level Training	Tactical Squadron
31-37	300 Level Training	Tactical Squadron
38-42	400 Level Training	Tactical Squadron

104. POI FOR MODIFIED REFRESHER PILOT AND WSO (CAT IV). (486 days or greater but less than 730 days since last FA-18 flight.)

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-6	100 Level Training (CAT IV)	FRS
7-15	200 Level Training	Tactical Squadron
16-22	300 Level Training	Tactical Squadron
23-27	400 Level Training	Tactical Squadron

105. POI FOR REFRESHER PILOT SAFE-FOR-SOLO (CAT V). (366 days or greater but less than 485 days since last FA-18 flight.)

<u>WEEKS</u>	<u>COURSE/PHASE</u>	<u>ACTIVITY</u>
1-5	100 Level Training (CAT V)	FRS
6-14	200 Level Training	Tactical Squadron
15-21	300 Level Training	Tactical Squadron
22-26	400 Level Training	Tactical Squadron

110. GROUND/ACADEMIC TRAINING COURSES OF INSTRUCTION

a. To ensure the highest quality of training and readiness, squadron commanding officers will ensure that the T&R Stage academic syllabus is conducted in accordance with the MAWTS-1 Course Catalog. This squadron academic training should be conducted once a week as a minimum. To add to the quality and scope of lectures given, the commanding officer should ensure that appropriately qualified individuals are sent to the schools listed below as a minimum.

<u>COURSE</u>	<u>ACTIVITY</u>
WTI	MAWTS-1 MCAS YUMA, AZ
Marine Division Tactics Course (MDTC)	MAWTS-1 MCAS YUMA, AZ
Navy Fighter Weapons School	NAS FALLON, NV
HARM University	CHINA LAKE, CA
SLAM School	POINT MUGU, CA
SLATS	NAS FALLON, NV
Warfighter School	TUCSON, AZ

120. FLIGHT/SIMULATOR/EVENT TRAINING FOR 100 LEVEL BASIC/TRANSITION/CONVERSION PILOT AND WSO (FA-18A/C/D)

1. Purpose. Provide initial training for individuals that do not currently have the 7523/7525 MOS and have not previously received training in the FA-18.

2. General.

a. Basic/Transition/Conversion (CAT I/II) aircrew will be assigned to fly the entire syllabus to include the entire FRS initial training syllabus.

b. Pilot training is provided at one of three "joint" FRSs (VMFAT-101, VFA-106, or VFA-125).

c. The pilot training standard is the CNO approved FA-18A/C/D pilot syllabus.

d. WSO training is provided only at VMFAT-101. The WSO training standard is the VMFAT-101, CNO sanctioned FA-18D WSO syllabus.

e. The CNO FRS Pilot and WSO training syllabi are not updated in conjunction with the MCO 3500.46 and therefore shall not be included in this order.

121. FLIGHT/SIMULATOR/EVENT TRAINING FOR REFRESHER PILOT AND WSO (FA-18A/C/D)

1. Purpose. Update training for pilots with a 7523 MOS and WSOs with a 7525 MOS who have not flown the FA-18 within the previous 365 days.

2. General. All flights will be conducted in daylight VMC until the pilot or WSO is night and instrument qualified in the FA-18.

a. FA-18 Tactical T&R Refresher

(1) The FA-18 Tactical T&R Refresher syllabus shall be completed in the tactical squadrons. An aircrew should fly all "R" coded events; however a refresher aircrew need not fly every event within a stage to be requalified in that stage. The commanding officer may tailor the refresher syllabus to fit the experience level of the refresher aircrew. When all of the "R" coded events within a stage are complete, the aircrew may be credited with the CRP for the entire stage of training. This assumes that the refresher aircrew had completed all events in the stage during his previous tour. If the refresher aircrew did not previously complete all of the events in a stage of training, he shall fly the entire stage, to include the "R" coded events.

b. FA-18 FRS Refresher Syllabi

(1) Pilots who have not flown the FA-18 in **366 days or greater** but less than 485 days will complete a modified FRS refresher (CAT V) program which consists of ground school, simulator training, and a safe-for-solo check in the FA-18. This training will be accomplished at a designated FRS training squadron.

(2) Aircrew who have not flown the FA-18 in **486 days or greater** but less than 730 days will complete a modified FRS refresher (CAT IV) program which consists of ground school, simulator training, 10 hours of flight time, and a NATOPS check in the FA-18. This training will be accomplished at a designated FRS training squadron.

(3) Aircrew who have not flown the FA-18 in **731 days or greater** will complete a comprehensive FRS refresher syllabus (CAT III). Each phase of training in the 100 Level is represented to ensure a comprehensive FRS refresher syllabus. Completion of appropriate ground, simulator, and FRS refresher flight training will be accomplished at a designated FRS training squadron.

3. CRP Accounting. Aircrew completing a modified FRS refresher syllabus are considered 60 percent CRP upon completion of the NATOPS check. 100 Level training proficiency is considered refreshed with 10 hours of flight time and a NATOPS check since the last flight in the FA-18 has not exceeded 24 months.

130. GROUND/FLIGHT/SIMULATOR/EVENT PERFORMANCE REQUIREMENTS FOR 200 LEVEL, 300 LEVEL, AND 400 LEVEL TRAINING (FA-18A/C/D)

1. General

a. Mission guidance is generalized to allow for local conditions and to allow this document to remain unclassified. Squadrons are encouraged to use the full range of tactics contained in the tactical manuals, USMC FA-18 TACSOP, and to adopt the latest developed and proven tactics.

b. All flights shall terminate with a comprehensive debrief with emphasis on aircrew performance utilizing all evaluation techniques available (e.g., TACTS, VTR/CVRS, participating aircrews, and AIC personnel).

c. An ATF is required for any initial event completed by a Basic, Transition, Conversion of Refresher pilot, or as recommended by the squadron Standardization Board.

d. The T&R Manual is the Marine Corps aircrew training document. It relates the training requirements and standards for Marine aircrew. When operational commanders assign FA-18 squadrons to prolonged commitments where specific T&R training is not available (e.g., deployed aboard CV), it is expected that degradation in some mission areas will occur. Commanding officers are authorized and encouraged to employ the FA-18 in specific missions relating to their current situation and avoid those mission areas not relevant to their situation. It is not intended for squadrons to train to specific mission areas and avoid capabilities that the FA-18 is very capable of conducting, but are difficult to coordinate. This type of mission specific training is granted only to squadron commanding officers deployed in austere conditions that prevent them from employing the T&R manual as written.

e. **The events within a stage should be flown in order.** Aircrew should not be scheduled to fly a higher stage syllabus event before flying the entire lower stage. For example, an aircrew should not fly any 300 level BAS event until all of the 200 level BAS codes are flown. The commanding officer may waive this requirement based on aircrew experience and operational necessity but waivers should be avoided to the greatest extent possible.

f. In the event that ordnance or dissimilar adversary requirements are not available the following 500 level tracking codes shall be logged in addition to the syllabus event code:

(1) TRK-598: Required ordnance not available.

(2) TRK-599: Dissimilar adversary not available.

## 2. Simulators

a. Flight simulators will be utilized to the maximum extent possible. To enhance flight training and airborne proficiency, simulators shall be flown as a prerequisite for all stages of training that require a simulator event when squadrons are located near mission capable simulators. Where simulators are not available, commanders may authorize the simulator events to be waived or flown in the aircraft as required.

b. During 200, 300, and 400 Level training, simulators can be used to update SSWD sorties in the 500 Level when the mission has first been flown in the aircraft. For example, if an aircrew completes an SSWD 500 Level event in the aircraft and flies a simulator event within the appropriate reflly interval, the simulator will update the SSWD proficiency for that particular 500 Level tracking code.

3. CRP Accountability. Logging multiple training codes on a single sortie shall be avoided. Exceptions should be made for sorties during which multiple unique training events can be completely accomplished. For example, it is appropriate to log three separate training codes if, during the conduct of a sortie, the flight completes all of the specific event requirements for a syllabus event, conducts air-to-air refueling and completes all AR requirements, then completes a third syllabus event prior to landing. If multiple syllabus events are to be accomplished during a single flight evolution, appropriate planning, briefing, and debriefing time must be allotted to ensure that requisite training objectives can be met. Multiple codes shall also be logged for 500 and 600 Level tracking events.

4. Aircrew Coordination. Aircrew coordination shall be briefed for all flights and/or events.

5. Evaluated (E CODED) Sorties. "E" coded sorties are used to evaluate whether an aircrew has mastered the skills outlined for that particular stage. Aircrew returning to the fleet as a refresher shall be evaluated on the (E coded) events in the Refresher syllabus. Evaluations shall be conducted by the flight lead and ATF's shall be placed in the Aircrew Performance Record.

6. Mission Performance Standards (MPS). Mission Performance Standards (MPSs) are listed for each T&R event description. These MPSs are training standards for individual aircrew performance and should be utilized by the evaluator as a guideline to determine the satisfactory completion of each event. If the Aircrew did not successfully attain the MPSs the training code shall not be logged as a completed flight and CRP credit shall not be given until proficiency is demonstrated.

7. 200 Level Training Stages

	A/C Sort	A/C Hrs	A/C CRP	D Sort	D Hrs	D CRP
Air-Air Refueling	2	2.6	0.6	2	2.6	0.6
Threat Reaction	1	1.3	0.4	1	1.3	0.4
Low Altitude Tactics	4	5.2	1.0	4	5.2	1.0
Night Systems (High)	5	6.5	1.0	5	6.5	1.0
Basic Air-Surface	8	10.4	3.5	8	10.4	3.5
Basic Fighter Maneuvering	7	9.1	2.9	7	9.1	2.3
Air Combat Maneuvering	4	5.2	1.4	4	5.2	1.4
Close Air Support	3	3.9	1.3	3	3.9	1.3
Armed Reconnaissance	2	2.6	1.0	2	2.6	0.7
Air Interdiction	3	3.9	1.5	3	3.9	1.5
Tactical Aerial Recon	*	*	*	3	3.9	0.9
FCLP / EAF	2	2.6	0.4	2	2.6	0.4
Totals	41	53.3	15.0	44	57.2	15.0

8. 300 Level Training Stages

	A/C Sort	A/C Hrs	A/C CRP	D Sort	D Hrs	D CRP
Basic Air-Surface	4	5.2	4.6	4	5.2	3.5
Air Combat Maneuvering	7	9.1	6.9	3	3.9	3.1
Close Air Support	3	3.9	2.9	3	3.9	2.9
Armed Reconnaissance	4	5.2	3.2	4	5.2	2.8
Air Interdiction	3	3.9	2.4	3	3.9	2.4
Forward Air Controller (A)	*	*	*	8	10.4	4.6
Tactical Air Coordinator (A)	*	*	*	2	2.6	0.7
Totals	21	27.3	20	27	35.1	20

9. 400 Level Training Stages

	A/C Sort	A/C Hrs	A/C CRP	D Sort	D Hrs	D CRP
Night Systems (Low)	3	3.9	0.9	3	3.9	0.9
Air Combat Maneuvering	6	7.8	2.0	6	7.8	2.0
Armed Reconnaissance	2	2.6	0.6	2	2.6	0.6
Air Interdiction	3	3.9	1.5	3	3.9	1.5
Forward Air Controller (A)	2	2.6	*	*	*	*
Totals	16	20.8	5	14	18.2	5

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10. 200, 300, 400 Level Totals

	A/C Sort	A/C Hrs	A/C CRP	D Sort	D Hrs	D CRP
(200 LEVEL)	41	53.3	15	44	57.2	15
(300 LEVEL)	21	27.3	20	27	35.1	20
(400 LEVEL)	16	20.8	5	14	18.2	5
Totals	78	101.4	40	85	110.5	40

131. 200 LEVEL TRAINING (FA-18A/C/D)1. Air-Air Refueling (AAR)

a. Purpose. Become proficient in aerial refueling operations.

b. General

(1) These sorties may be combined with other syllabus flights.

(2) Aerial refueling sorties should be flown IAW MCCRES Mission Performance Standards

c. Academic Training. Refer to MAWTS-1 Course Catalog.

d. Simulator Training. None.

e. Flight Training. (2 Flights, 2.6 Hours).

AAR-200                      1.3                      R FA-18A/C/D A

Goal. Become proficient in day aerial refueling.

Requirement. Five contacts required for completion. If proficient, one contact required for completion.

Mission Performance Standards

- (a) Executes safe rendezvous procedures.
- (b) Uses proper communications procedures.
- (c) From a stabilized position, engages the basket expeditiously.
- (d) Responds quickly and safely to all communications and communications out signals from the tanker aircraft.

Prerequisite. None.

Ordinance. None.

External Syllabus Support. One tanker.

AAR-201                      1.3                      R 2 FA-18A/C/D A N (NS)

Goal. Become proficient in night aerial refueling.

Requirement. Five contacts required for completion. If proficient, one contact required for completion.

Mission Performance Standards

- (a) Executes safe rendezvous procedures.
- (b) Uses proper communications procedures.
- (c) From a stabilized position, successfully engages the basket expeditiously.
- (d) Responds quickly and safely to all communications and communications out signals from the tanker aircraft.

Prerequisite. AAR-200.

Ordinance. None.

External Syllabus Support. One tanker.

## 2. Threat Reaction (TRXN)

a. Purpose. Develop proficiency in medium to high altitude tactics, techniques, and procedures (TTPs) for survival in a surface-to-air threat environment. These TTPs will be utilized in subsequent phases of training where a surface-to-air threat exists.

b. General. The events in this stage of training are designed to be flown on an electronic warfare range with scorable threat flyout simulations. A TACTS range with simulated RWR and missile flyout may be substituted.

c. Academic Training. Refer to MAWTS-1 Course Catalog.

d. Simulator Training. (1 Period, 1.0 Hour).

STRXN-202      1.0      WTT S

Goal. Practice medium and high altitude TTPs to survive in a surface-to-air threat environment. Emphasis should be placed on correctly assessing the relative threat level and performing the appropriate preemptive or reactive maneuvers.

Requirement. Conduct a simulated two-ship air interdiction mission in a medium to high threat surface-to-air environment. Conduct preemptive and reactive maneuvers to defeat the simulated IADS. Consult current tactical publications for appropriate maneuvers.

e. Flight Training. (1 Flight, 1.3 Hours).

TRXN-203      1.3      T,R 2 FA-18A/C/D A (NS)

Goal. Practice medium and high altitude TTPs to survive in a surface-to-air threat environment. Emphasis should be placed on correctly assessing the relative threat level and performing the appropriate preemptive or reactive maneuvers.

Requirement. Conduct a two-ship air interdiction mission in a medium to high threat surface-to-air environment. Conduct preemptive and reactive maneuvers to defeat the simulated IADS. Consult current tactical publications for appropriate maneuvers.

### Mission Performance Standards

- (a) Correctly assesses the threat based upon the briefed scenario and aircraft system cueing (i.e. ALR-67, etc.).
- (b) Correctly performs briefed TTPs while maintaining situational awareness on position relative to flight.
- (c) Able to survive the simulated threat and continue with mission.

Prerequisite. STRXN-202.

Ordinance. 4 BDU-45 (Mk-83 inert), 20 chaff, and 10 flares.



External Syllabus Support. EW/TACTS range with ground based simulators.

5. Low Altitude Tactics (LAT)

a. Purpose. Develop proficiency in FA-18 low altitude tactics.

b. General

(1) Emphasis should be placed on LAT procedures, communications, and maneuver techniques. Upon completion of the LAT stage, aircrew should be able to perform low altitude navigation, tactical ingress into a heavily defended target at low altitude, and execute defensive maneuvers against surface-to-air or air-to-air threats.

(2) SLAT-204 is a prerequisite for the corresponding training flight when the sortie has not been previously flown or when the aircrew is returning to the fleet as a transition or refresher aircrew. Simulators are not prerequisites for sorties that are being reflown.

(3) Flights shall be flown on a published MTR or approved LAT course.

(4) LAT-205, 206, 207 and 208 require a LATI chase when the aircrew is not LAT qualified. LAT 208 requires a LATI chase when an aircrew loses proficiency.

(5) Currency and altitude restrictions, as stated in MCO P3500.14, apply. (T&R Vol I)

(6) Aircraft should be configured with an operable VTR/CVRS, ALQ-126B, ALR-67, CATM-9, KY-58, and chaff and flares.

(7) Upon completion of this stage, aircrew may be designated LAT qualified by their commanding officer.

c. Academic Training. Refer to MAWTS-1 Course Catalog.

d. Simulator Training. (1 Period, 1.0 Hour).

SLAT-204            1.0            R WTT S

Goal. Practice two dimensional and three dimensional LAT. Emphasis should be placed on LAT procedures, communications, and maneuver techniques.

Requirement. Perform 50% dive recoveries, Nav/Hard/Break turns, speed rush baseline, MAC, vertical jinks, straight ahead oblique jinks, turning oblique jinks, and reverse oblique jinks.

e. Flight Training. (4 Flights, 5.2 Hours).

LAT-205            1.3            R 2 FA-18A/C/D A

Goal. Develop proficiency in single ship and section conventional LAT. Emphasis should be placed on LAT procedures, communications, and maneuver techniques.

Requirement. As a single ship, perform descent to comfort level, straight and level, ridgeline crossings, speed rush

base line, and Nav/Hard/Break turns. As a section, perform called and uncalled turns, ridgeline crossings, and execute a simulated target attack.

Mission Performance Standards

- (a) Performs maneuvers as briefed.
- (b) Remains above briefed minimum altitude.
- (c) Adheres to dive recovery rules.

Prerequisite. SLAT-204, TRXN-203.

Ordinance. 20 chaff/10 flares.

External Syllabus Support. None.

LAT-206

1.3                      2 FA-18A/C/D A

Goal. Practice two dimensional and three dimensional LAT. Emphasis should be placed on LAT procedures, communications, and maneuver techniques.

Requirement. Perform 50% dive recoveries, level turns, ridgeline crossings, MAC, Nav/Hard/Break turns, vertical jinks, straight ahead oblique jinks, turning oblique jinks, reverse oblique jinks, and a section target attack.

Mission Performance Standards

- (a) Performs maneuvers as briefed.
- (b) Adheres to dive recovery rules.
- (c) Remains above briefed minimum altitude.

Prerequisite. LAT-205.

Ordinance. 20 chaff/10 flares.

External Syllabus Support. None.

LAT-207

1.3                      2 FA-18A/C/D A

Goal. Develop proficiency in single ship and section threat reaction drills and to introduce low altitude intercepts. Emphasis should be placed on LAT procedures, communications, and maneuver techniques.

Requirement. As a single ship, perform a level S, SAM break, guns jink, SAM weave, and a simulated target attack. Perform the same maneuvers as a section. Conduct low altitude intercepts with the fighter at 300-500 ft AGL and the bogey at 600-1000 ft AGL. Two intercepts required for completion.

Mission Performance Standards

- (a) Knows 50% rule, 10° rule, dive recovery rules, small descent ROT, and mission cross-check times for straight and level and turning flight.
- (b) Uses standardized communication.
- (c) Able to fly maneuvers in accordance with LAT rules.

- (d) Quickly responds to commands from chase aircraft.
- (e) Adheres to LAT rules of conduct.

Prerequisite. LAT-206.

Ordinance. 20 chaff and 10 flares.

External Syllabus Support. None.

LAT-208E      1.3              R 2 FA-18A/C/D A

Goal. Practice all LAT maneuvers and evaluate LAT procedures, communications, and maneuver techniques.

Requirement. Perform 50% dive recoveries, level turns, ridgeline crossings, MAC, break turns, vertical jinks, straight ahead oblique jinks, turning oblique jinks, reverse oblique jinks, threat reaction drills, and a section target attack.

Mission Performance Standards

- (a) Knows 50% rule, 10° rule, dive recovery rules, small descent ROT, and mission cross-check times for straight and level and turning flight.
- (b) Uses standardized communication.
- (c) Able to fly maneuvers in accordance with LAT rules.
- (d) Quickly responds to commands from chase aircraft.
- (e) Adheres to LAT rules of conduct.

Prerequisite. All previous LAT sorties completed.

Ordinance. 20 chaff and 10 flares.

External Syllabus Support. None.

## 6. Night Systems (NS)

a. Purpose. Develop proficiency using Night Vision Devices (NVDs).

b. General

(1) A MAWTS-1 certified NSI is required to fly with NON-NSQ(H) aircrew for NS-210 through NS-214.

(2) Upon completion of NS-210 through NS-214E with a designated NSI, an aircrew may be designated Night Systems Qualified (High) NSQ(H).

(3) WSOs that have successfully completed the FRS Night Attack (NATK) syllabus are only required to fly NS-211 and NS-214. Upon successful completion of NS-211 and NS-214 the WSO aircrew shall be given credit for attaining proficiency in the remaining events in the 200 level NS syllabus.

(4) At the discretion of the commanding officer, NSQ(H) aircrew may fly any night or night optional event in the T&R with the aid of NVGs. NSQ(H) aircrew are limited to a minimum altitude of 500 ft AGL for all night sorties during high light level conditions (lux of 0.0022 or greater). During low-light conditions, NSQ(H) aircrews are limited to a minimum altitude of 1000 ft AGL. In any light level, no lower than local SOPs.

(5) Consult MCO P3500.14 for applicable light level and currency restrictions for NS sorties.

c. Academic Training. Refer to MAWTS-1 Course Catalog.

d. Simulator Training. (1 Period, 1.0 Hours).

SNS-209                      1.0                      WTT S

Goal. Practice donning and removing NVDs, formation flight, radar intercepts, and high altitude ordnance delivery using NVDs.

Requirement. Perform formation flight and radar intercepts with the aid of NVDs. Perform medium and high altitude ordnance deliveries. Two radar intercepts and four ordnance deliveries using high and medium angle dives are required for completion.

e. Flight Training. (5 Flights, 6.5 Hours).

NS-210                      1.3                      2 FA-18A/C/D A NS

Goal. Introduce formation flying and intercept procedures with the aid of NVDs.

Requirement. Fly goggle tac wing formation enroute to the area. Practice goggle cruise/tac wing/spread/trail formations above 5,000 ft AGL. Introduce various combinations of light options and range cues. Perform four break up and rendezvous. Conduct one forward quarter radar intercept to an AIM-7 LAR and one stern intercept to an AIM-9 LAR.

Mission Performance Standards

- (a) Maintains sight of lead.
- (b) Conducts safe rendezvous.

Prerequisite. SNS-209.

Ordinance. CATM-9 and CATM-7/120.

External Syllabus Support. None.

NS-211                      1.3                      R 2 FA-18A/C/D vs 2 Adversaries A NS

Goal. Conduct section attacks against medium altitude, non-maneuvering forward quarter capable bogies using NVDs. Emphasis should be placed on section intercept procedures using NVDs, maintaining proper formation, sorting, BVR weapons employment, and standardized communications. Demonstrate the effect of expendables on NVGs.

Requirement. With a minimum of 40 NM separation, the fighters commence the intercept at medium altitude. The bogies commence the intercept from 10,000-30,000 ft, any airspeed, non-maneuvering. Fighter weapons control status is tight with PID criteria set by flight lead according to theater of operation. Three runs required for completion. One intercept will be a night ICAO intercept and escort. Expendables should

be used by the bogey and fighter on at least one run.

Mission Performance Standards

- (a) Maintains visual mutual support.
- (b) Conduct proper radar usage.

Prerequisite. NS-210.

Ordnance. CATM-9, 10 chaff, 5 flares, and CATM-7/120.

External Syllabus Support. Two adversaries.

NS-212

1.3                      2 FA-18A/C/D A NS

Goal. Introduce high and medium angle dive deliveries utilizing NVDs.

Requirement. Conduct high and medium angle dive deliveries on a raked range using NVDs. Minimum recovery altitude should be 5,000 ft AGL. Six deliveries are required for completion.

Mission Performance Standards

- (a) Knows and understands visual illusions associated with NVD usage.
- (b) Adheres to briefed delivery parameters and TACSOP valid delivery criteria.
- (c) Achieves a CEP within the TACSOP valid bomb accuracy parameters.
- (d) Adheres to tactical abort parameters.

Prerequisite. NS-211.

Ordnance. 6 MK-76, 20 chaff.

External Syllabus Support. Raked Range.

NS-213

1.3                      R 2 FA-18A/C/D A NS

Goal. Introduce section high and medium angle target attacks.

Requirement. Conduct section high and medium angle dive deliveries on a raked range using NVDs. Minimum recovery altitude should be 5,000 ft. Six deliveries are required for completion.

Mission Performance Standards

- (a) Knows and understands visual illusions associated with NVD usage.
- (b) Adheres to briefed delivery parameters and TACSOP valid delivery criteria.
- (c) Achieves a CEP within the TACSOP valid bomb accuracy parameters.
- (d) Adheres to tactical abort parameters.
- (e) Maintains visual mutual support.

Prerequisite. NS-212.

Ordnance. 6 MK-76, 20 chaff, 10 flares.

External Syllabus Support. Raked range.

NS-214E            1.3            2 FA-18A/C/D A NS

Goal. Introduce section low level to single ship low altitude pop deliveries.

Requirement. Conduct a section low level and single ship target attack using a low pop delivery maneuver. One low level and six ordnance deliveries on a raked range required for completion.

Mission Performance Standards

- (a) Knows and understands visual illusions associated with NVD usage.
- (b) Adheres to briefed delivery parameters and TACSOP valid delivery criteria.
- (c) Achieves a CEP within the TACSOP valid bomb accuracy parameters.
- (d) Adheres to tactical abort parameters.
- (e) Maintains visual mutual support.

Prerequisite. NS-213.

Ordnance. 6 MK-76, 20 chaff, 10 flares.

External Syllabus Support. Raked range.

7. Basic Air-to-Surface (BAS)

a. Purpose. Develop proficiency in basic air to surface ordnance delivery skills.

b. General

(1) Emphasis should be placed on sensor target acquisition, designation techniques, delivery modes and attack parameters.

(2) BAS-222 through BAS-228E should be flown on a raked range with bomb impact scoring capability.

(3) Aircraft should be configured with an operable VTR/CVRS, ALQ-126B, ALR-67, targeting FLIR, LDT, CATM-9, KY-58, chaff, and flares.

c. Academic Training. Refer to MAWTS-1 Course Catalog.

d. Simulator Training. (1 Period, 1.0 hour)

SBAS-220            1.0            R WTT S

Goal. Practice guiding PGMs with the LTD/R, designating targets with the surface modes of the APG-65/73, and tracking laser energy with the LDT. Emphasis should be placed on capabilities and limitations, cockpit displays, and employment techniques.

Requirement. Guide PGMs to impact using the LTD/R, four self

lasing deliveries, four radar designations to LTD/R guidance, and four runs utilizing the LDT required for completion.

e. Flight Training. (8 Flights, 10.4 Hours).

<u>BAS-221</u>	<u>1.3</u>	<u>2 FA-18A/C/D A (NS)</u>
<p><u>Goal</u>. Develop aircrew proficiency in planning and executing a low altitude navigation mission using the F/A-18 navigation system. Emphasis should be placed on accurate navigation, fuel management, timing, sensor usage, update techniques, and recognizing visual check points.</p> <p><u>Requirement</u>. Fly a published MTR. Plan a high-low-high profile with fuel figures utilizing a mission planning system. Validate these planning figures during flight. Find three checkpoints with either the radar or FLIR, and identify three visual checkpoints along the route. Perform one sensor update during flight.</p> <p><u>Mission Performance Standards</u></p> <p>(a) Overfly checkpoints within 15 seconds of planned time.</p> <p><u>Prerequisite</u>. None.</p> <p><u>Ordinance</u>. As required if combined with a BAS syllabus flight.</p> <p><u>External Syllabus Support</u>. Local MTR.</p>		
<u>BAS-222</u>	<u>1.3</u>	<u>R 2+ FA-18A/C/D A (N, NS)</u>
<p><u>Goal</u>. Practice low, medium, and high angle visual ordnance delivery skills using INS and visual designations to computed delivery. Emphasis should be placed on designation techniques, attack parameters and delivery on a raked range.</p> <p><u>Requirement</u>. Conduct low, medium, and high angle ordnance delivery on a raked range using Auto Slew and CCIP. Four runs low angle, four runs medium angle, and four runs high angle required for completion. Half of each type delivery will utilize INS designation prior to attack and half will use visual designations during attack.</p> <p><u>Mission Performance Standards</u></p> <p>(a) Adheres to briefed delivery parameters and TACSOP valid delivery criteria.</p> <p>(b) Adheres to tactical abort parameters, when applicable.</p> <p>(c) Achieves a CEP within the TACSOP valid bomb accuracy parameters.</p> <p><u>Prerequisite</u>. BAS-221.</p> <p><u>Ordinance</u>. 12 MK-76, 20 chaff, and 10 flares.</p> <p><u>External Syllabus Support</u>. Raked Range with target scoring.</p>		

BAS-223                      1.3                      2+ FA-18A/C/D A

Goal. Practice low and high angle pop up attacks using the computed delivery modes. Emphasis should be placed on attack parameters, delivery modes, and designation techniques.

Requirement. Conduct low and high angle pop up attacks on a raked range using Auto Slew and CCIP. Minimum of three low angle pop attacks, three high angle pop attacks, and two strafe attacks are required for completion.

Mission Performance Standards

- (a) Adheres to briefed delivery parameters and TACSOP valid delivery criteria.
- (b) Adheres to tactical abort parameters, when applicable.
- (c) Achieves a CEP within the TACSOP valid bomb accuracy parameters.

Prerequisite. BAS-222.

Ordnance. 6 BDU-48, 6 MK-76, 500 20mm, 20 chaff, and 10 flares.

External Syllabus Support. Raked Range with target scoring.

BAS-224                      1.3                      2+ FA-18A/C/D A (NS)

Goal. Practice ordnance delivery using the TFLIR. Emphasis should be placed on target acquisition and designation, attack parameters, and delivery.

Requirement. Conduct level and medium/high angle ordnance delivery using TFLIR for acquisition and designation. Three Auto or Scene Track attacks and three Nav stabilized attacks required for completion. If on a LASER safe range, use LTD/R for target ranging.

Mission Performance Standards

- (a) Able to acquire and designate targets using the TFLIR.
- (b) Adheres to briefed delivery parameters and TACSOP valid delivery criteria.
- (c) Adheres to tactical abort parameters, when applicable.
- (d) Able to maintain TFLIR designation on target until weapons impact.
- (e) Achieves a CEP within the TACSOP valid bomb accuracy parameters.

Prerequisite. SBAS-220.

Ordnance. 6 MK-76 or 2 LGTR, 20 chaff, and 10 flares.

External Syllabus Support. Raked range with target scoring.

BAS-225                      1.3                      2+ FA-18A/C/D A (NS, N)

Goal. Practice ordnance delivery using the LDT. Emphasis should be placed on target acquisition and designation, attack parameters and delivery.



Requirement. Conduct low, medium or high angle ordnance delivery using LDT for acquisition and designation. Designation will be from an off-board sensor. Three Auto attacks and three CCIP attacks required for completion.

Mission Performance Standards

- (a) Adheres to briefed delivery parameters and TACSOP valid delivery criteria.
- (b) Adheres to tactical abort parameters, when applicable.
- (c) Proper comm brevity in accordance with J-LASER publication.
- (d) Acquire LASER spot on 75% of attempts.
- (e) Achieve a CEP within the TACSOP valid bomb accuracy parameters.

Prerequisite. SBAS-220.

Ordnance. 6 MK-76 or 2 LGTR, 20 chaff, and 10 flares.

External Syllabus Support. LASER capable raked or tactical range. One laser designation platform.

BAS-226

1.3                      2+ FA-18A/C/D A NS

Goal. At night, practice section ingress to medium and high angle visual ordnance delivery skills using INS designations to computed delivery modes. Emphasis should be placed on visual mutual support, attack parameters and delivery modes.

Requirement. Conduct section ingress to medium and high angle ordnance delivery on a raked range using Auto Slew and CCIP. Four runs low angle, four runs medium angle, and four runs high angle required for completion.

Mission Performance Standards

- (a) Adheres to briefed delivery parameters and TACSOP valid delivery criteria.
- (b) Adheres to tactical abort parameters, when applicable.
- (c) Achieves a CEP within the TACSOP valid bomb accuracy parameters.

Prerequisite. BAS-222.

Ordnance. 12 MK-76, 20 chaff, and 10 flares.

External Syllabus Support. Raked Range with target scoring.

BAS-227

1.3                      R 2+ FA-18A/C/D A NS

Goal. Practice night high altitude ordnance delivery using the TFLIR. Emphasis should be placed on target acquisition and designation, attack parameters, and delivery.

Requirement. Conduct level and medium/high angle ordnance delivery using TFLIR for acquisition and designation. Three Auto or Scene Track attacks and three Nav stabilized attacks required for completion. If on a LASER safe range, use LTD/R

for target ranging. Minimum recovery altitude no lower than 10,000 to 15,000 feet.

Mission Performance Standards

- (a) Able to acquire and designate targets using the TFLIR.
- (b) Adheres to briefed delivery parameters and TACSOP valid delivery criteria.
- (c) Adheres to tactical abort parameters, when applicable.
- (d) Able to maintain TFLIR designation on target until weapons impact plus 5 seconds for BHA.
- (e) Achieves a CEP within the TACSOP valid bomb accuracy parameters.

Prerequisite. BAS-224.

Ordinance. 6 MK-76 or 2 LGTR, 20 chaff, and 10 flares.

External Syllabus Support. Raked or tactical Range.

BAS-228E

1.3 R 2 FA-18A/C/D A (NS)

Goal. Practice section low and high angle pop up attacks on a raked range. Emphasis should be placed on attack parameters, delivery modes, designation techniques, frag avoidance timing, and deconfliction.

Requirement. Conduct section low and high angle pop up attacks on a raked range. Two section low angle pop up attacks, two lead low pop/wing high pop attacks, one section Hornet high attack, one section Hornet cool pop, and two strafe attacks are required for completion.

Mission Performance Standards

- (a) Able to achieve a CEP within the TACSOP valid bomb accuracy parameters.
- (b) Adheres to tactical abort parameters.
- (c) Maintains mutual support throughout attack.

Prerequisite. AS-223.

Ordinance. 12 MK-76, 500 20mm, 10 chaff, and 10 flares.

External Syllabus Support. Raked Range with target scoring.

6. Basic Fighter Maneuvering (BFM)

a. Purpose

(1) Increase aircrew proficiency in employing the FA-18 in basic fighter maneuvering.

(2) Knowledge of air-to-air aircraft systems and performance characteristics should be emphasized throughout this phase. Employment envelopes and shot validity for air-to-air weapons will be stressed on every mission.

b. General

(1) BFM-230 through BFM-236 requires an ACTI flight lead in the flight when any participating aircrew is not ACM qualified. For FA-18D aircrew, a non-ACM qualified pilot requires an ACTI WSO in the aircraft and an ACTI pilot flight lead. A non-ACM qualified WSO requires an ACTI pilot in the aircraft. If all participating aircrew are ACM qualified there is no requirement for an ACTI in the flight.

(2) After successful completion of the BFM and the ACM stages and successfully completing the ACM-245 evaluation sortie, the aircrew is eligible to be ACM qualified by the commanding officer.

(3) Aircraft should be configured with an operable VTR/CVRS, ALR-67, CATM-9 and chaff and flares.

- c. Academic Training. Refer to MAWTS-1 Course Catalog.
- d. Simulator Training. None.
- e. Flight Training. (7 Flights, 9.1 Hours)

BFM-230                      1.3                      R 2 FA-18A/C/D A

Goal. Practice guns snap-shot-drill (SSD) and maneuvering the FA-18 in the slow speed high AOA regime. Emphasis should be placed on energy management and assessment, deck awareness, maintaining sight, expendable usage, and weapons employment recognition.

Requirement. One SSD, two flat scissors, and two rolling scissors.

Mission Performance Standards

(a) Manages FA-18 energy to maximize performance of the aircraft.

(b) Recognizes WEZs and employs the appropriate weapons.

(c) Takes valid shots.

Prerequisite. None.

Ordinance. CATM-9, 5 chaff, 10 flares.

External Syllabus Support. None.

BFM-231                      1.3                      2 FA-18A/C/D A

Goal. Practice the SSD and the mechanics of offensive BFM. Emphasis should be placed on energy management and assessment, turn circle theory, deck awareness and weapons employment recognition.

Requirement. One SSD, three offensive perch setups and I guns defense (executed from an offensive start) required. Offensive perch setups will be conducted with 3000 ft, 6000 ft, and 9000 ft separation between aircraft. The guns defense start is at the discretion of the flight lead.

Mission Performance Standards

- (a) Maintains offensive position and achieves a valid follow-on shot.
- (b) Recognizes WEZs and employs appropriate weapons.
- (c) Takes valid shots.

Prerequisite. BFM-230

Ordinance. CATM-9, 5 chaff, 10 flares.

External Syllabus Support. None.

BFM-232

1.3                      2 FA-18A/C/D A

Goal. Practice the SSD and the mechanics of defensive BFM. Emphasis should be placed on energy management and assessment, turn circle theory, deck awareness and weapons employment recognition.

Requirement. One SSD, three defensive perch setups and 1 guns defense required. Defensive perch setups will be conducted with 3000 ft, 6000 ft, and 9000 ft separation between aircraft. The guns defense start is at the discretion of the flight lead.

Mission Performance Standards

- (a) Manages FA-18 energy to deny valid follow-on shot by offensive aircraft.
- (b) Recognizes bandit WEZ and conducts appropriate defense.
- (c) Executes timely expendable usage (defeats IR MSLs).

Prerequisite. BFM-231.

Ordinance. CATM-9, 5 chaff, 10 flares.

External Syllabus Support. None.

BFM-233

1.3                      R 2 FA-18A/C/D A

Goal. Practice SSD, FQMD and BFM against a Cat IV adversary. Emphasis should be placed on energy management and assessment, game plans, offensive and defensive transition recognition, weapons employment, deck awareness and expendable usage.

Requirement. One SSD, two neutral engagements from a known start, and two FQMDs to engagements. The altitude for known start engagements should be varied to demonstrate the impact of altitude on fighter performance and game plan.

Mission Performance Standards

- (a) Valid FQMD to defeat SAR-1 missile and follow-on IR-3 missile.
- (b) Execute valid game plan.
- (c) Takes valid shots.

Prerequisite. BFM-232.

Ordnance. CATM-9, 5 chaff, 10 flares.

External Syllabus Support. None.

BFM-234

1.3 1 FA-18A/C/D vs 1 Dissimilar Adversary A

Goal. Evaluate BFM skills versus a dissimilar adversary.

Requirement. Three engagements required for completion.

Mission Performance Standards

- (a) Executes appropriate game plan for type adversary.
- (b) Takes valid shots.

Prerequisite. BFM-233.

Ordnance. CATM-9, 10 chaff, 20 flares.

External Syllabus Support. One dissimilar adversary. If FA-18 aircrew is not ACM qualified the adversary must be instructor qualified.

BFM-235

1.3 2 FA-18A/C/D vs 1 Adversary A

Goal. Practice section maneuvering against a single CAT IV adversary with SAR-1 and IR-3 missiles. Emphasis should be placed on mutual support, engaged communications, expendable usage, and minimizing time to kill.

Requirement. One engagement from a neutral start and two engagements from a defensive start are required for completion.

Mission Performance Standards

- (a) Section able to survive and achieve valid shot.
- (b) Utilizes coordinated section engaged maneuvering.
- (c) Utilizes proper communications brevity.
- (d) Maintains tally

Prerequisite. BFM-234.

Ordnance. CATM-9, 10 chaff, 20 flares.

External Syllabus Support. One adversary.

BFM-236

1.3 2 FA-18A/C/D vs 2 Dissimilar Adversaries A

Goal. Practice section maneuvering against dissimilar adversaries armed with IR-3 missiles from offensive, neutral, and defensive starts.

Requirement. One forward quarter intercept to an engagement, one beam entry (by fighters) to an engagement, and one beam entry (by adversaries) to an engagement are required for completion. No kills should occur prior to the first merge.

Mission Performance Standards

- (a) Performs visual sort.
- (b) Utilizes coordinated section engaged maneuvering to defeat the adversaries.
- (c) Employs proper communications brevity.
- (d) Takes valid shots.
- (e) Maintain tally

Prerequisite. BFM-235.

Ordinance. CATM-9, 10 chaff, 20 flares.

External Syllabus Support. Two dissimilar adversaries.

## 12. Air Combat Maneuvering (ACM)

### a. Purpose

(1) Increase aircrew proficiency in employing the FA-18 in the BVR to WVR air-to-air arena.

(2) Knowledge of air-to-air weapons and tactics employment should be emphasized throughout this phase. Mission objectives, timeline awareness, mutual support, sensor usage, standardized communication, weapons employment, AIC integration, short range radar mechanics, defensive reaction and targeting and flow decisions will be stressed on every mission.

(3) AIC and Data Link should be utilized to the maximum extent possible. If co-located with AIC controllers, a face-to-face brief and debrief should be conducted for all engagements that begin from beyond visual range.

(4) The TACTS range shall be utilized to the maximum extent possible. If units are not co-located with an appropriate TACTS facility, every effort should be given to ensure aircrew have the ability to fly on and debrief in a TACTS facility prior to gaining their ACM qualification.

### b. General

(1) ACM-242 is not considered ACM by the definitions in OPNAVINST 3710.7 or MCO 3500.14 and, therefore, does not require an ACTI for non-ACM qualified aircrew. However, aircrew are limited to a maximum of 180 degrees of turn at the merge. If ACM-242 is flown with the intent of conducting ACM, then these ACTI requirements do apply.

(2) ACM-243 through ACM-245E are considered ACM by the definitions in OPNAVINST 3710.7 and MCO 3500.14. These sorties require an ACTI in the flight when any participating aircrew is not ACM qualified. For FA-18D aircrew, a non-ACM qualified pilot requires an ACTI WSO in the aircraft and an ACTI pilot flight lead. A non-ACM qualified WSO requires an ACTI pilot in the aircraft.

(3) After successful completion of the BFM and the ACM stages and successfully completing the ACM-245 evaluation sortie, the aircrew is eligible to be ACM qualified by the commanding officer.

(4) Aircraft should be configured with an operable VTR/CVRS, ALQ-126B, ALR-67, CATM-9, CATM-7/120, KY-58, and chaff and flares.

### c. Academic Training. Refer to MAWTS-1 Course Catalog.

d. Simulator Training. (2 Periods, 2.0 Hours)

SACM-240            1.0            WTT/TOFT    S

Goal. Conduct radar attacks against an unknown number of bandits with SAR-1 missiles. Emphasis should be placed on section intercept procedures, sorting, RWR tactics, weapons employment, and standardized communications.

Requirement. With a minimum of 40 NM separation, the fighters commence the intercept at medium altitude. The bogies commence the intercept at any altitude and airspeed, maneuvering. Fighter weapons control status is tight with PID criteria set by flight lead according to theater of operation. On this sortie, PID criteria will be satisfied in time to allow BVR weapons employment. Four intercepts required for completion.

Mission Performance Standards

- (a) Arrives at a valid forward quarter or rear quarter weapons envelope.
- (b) Takes valid shots.
- (c) Appropriate defensive reactions

Prerequisite. None.

SACM-241            1.0            R    WTT/TOFT    S

Goal. Conduct the appropriate radar mechanics against maneuvering targets post meld/pre-shot, and post shot. Conduct appropriate short range radar mechanics post notch and post merge.

Requirement. Complete a minimum of 7 radar mechanics runs to include the following:

- (a) 2 post meld pre-shot target maneuvers
- (b) 2 post shot target maneuvers
- (c) 2 post notch and in to the merge short range radar mechanics
- (d) 1 complete intercept requiring a combination of the above skills

Mission Performance Standards

- (a) Complete the correct maneuvering targets radar mechanics IAW the USMC FA-18 TACSOP.
- (b) Complete the correct short range radar (SRR) mechanics IAW the USMC FA-18 TACSOP.

Prerequisite. SACM-240.

e. Flight Training. (4 Flights, 5.2 Hours).

ACM-242            1.3            R    2 FA-18A/C/D    A    (NS)

Goal. Conduct radar attacks against a single bandit armed with SAR-1 missiles.

Requirement. With a minimum of 40 nm separation, the fighter

commences the intercept at 15,000 ft. The bandit will commence one intercept from 10,000-25,000 ft, one intercept from 30,000-40,000 ft, and one intercept from 1000-5000 ft, any airspeed, maneuvering ( $\pm 45^0$ ). Three forward quarter intercepts and one stern intercept required for completion.

Mission Performance Standards

- (a) Arrives at a valid forward quarter or rear quarter weapons envelope.
- (b) Takes valid shots.

Prerequisite. SACM-240, 241.

Ordinance. CATM-9 and CATM-7/120.

External Syllabus Support. None.

ACM\_243

1.3 R 2 FA-18A/C/D vs 2 Adversaries A

Goal. Practice section VID intercepts versus a section of non-maneuvering / maneuvering bandits armed with SAR-1 missiles. Focus on radar mechanics, formation, communications, tactical timeline employment, and VID intercept mechanics.

Requirement. With a minimum of 40 NM separation, the fighters commence the intercept at 15,000 ft. Fighter weapons control status is tight with a PHID criteria that prevents weapons employment until a VID. Bandits weapons control status is unknown. Bandits will commence intercepts from between 1,000 ft and 40,000 ft and are cleared to maneuver. Bandits will maintain sortable formations throughout the intercepts and all bandit tactics will be complete NLT 15 NM prior to the merge. Three intercepts required for completion.

Mission Performance Standards

- (a) Achieve radar sort.
- (b) Maintains mutual support.
- (c) Achieves valid shot at the merge.

Prerequisite. ACM-242.

Ordinance. CATM-9, 20 chaff, 10 flares, and CATM-7/120.

External Syllabus Support. Two adversaries.

ACM-244

1.3 R 2 FA-18A/C/D vs 2 Dissimilar Adversaries A (NS)

Goal. Conduct section attacks against 2 dissimilar adversaries with SAR-1 and IR-3 missiles. Emphasis should be placed on section intercept procedures, maintaining proper formation, targeting, sorting, weapons employment and standardized communications.

Requirement. With a minimum of 40 NM separation, the fighters commence the intercept at medium altitude. The maneuvering bogies commence the intercept at any altitude and airspeed,. Bogey presentations will be level 2 or level 3 IAW the USMC



FA-18 TACSOP. Fighter weapons control status is tight with PHID criteria. One run with PHID criteria not met until inside 15nm. Three intercepts required for completion.

Mission Performance Standards

- (a) Maintains mutual support.
- (b) Executes proper radar mechanics.
- (c) Targets as directed.
- (d) Recognizes threat tactics.
- (e) Takes valid shots.
- (f) Timeline awareness

Prerequisite. ACM-243.

Ordinance. CATM-9, 20 chaff, 10 flares, and CATM-7/120.

External Syllabus Support. Two dissimilar adversaries.

ACM-245E

1.3 E 4 FA-18A/C/D vs Unknown Adversaries A (NS)

Goal. Conduct a division OCA mission against four adversaries with SAR-1 and IR-3 missiles. Emphasis should be placed on division intercept procedures, maintaining proper formation, targeting and sorting, BVR weapons employment, and standardized communications.

Requirement. With a minimum of 40 NM separation, the fighters commence the intercept at medium altitude. Bandits commence the intercept at any altitude and airspeed, maneuvering. Bandits present a level 2 bandit simulation IAW the USMC FA-18 TACSOP. Fighter weapons control status is tight, with PHID criteria set by flight lead according to theater of operation. Three intercepts required for completion.

Mission Performance Standards

- (a) Maintains mutual support.
- (b) Executes proper radar mechanics.
- (c) Targets as directed.
- (d) Recognizes threat tactics.
- (e) Takes valid shots.
- (f) Timeline awareness

Prerequisite. ACM-244.

Ordinance. CATM-9, 20 chaff, 10 flares, CATM-7/120.

External Syllabus Support. Minimum of 3 adversaries.

8. Close Air Support (CAS)

- a. Purpose. Develop proficiency in delivering ordnance on a CAS mission.
- b. General

(1) Emphasis should be placed on mission planning, aircraft system management, attack parameters, delivery modes, designation techniques, information flow through the C<sup>3</sup> system, and adherence to CAS procedures and all FAC or FAC(A) instructions.

(2) The commanding officer may authorize heavy inert ordnance in lieu of live ordnance when necessary. Ensure required ordnance not available (TRK-598) code is logged.

(3) Aircraft should be configured with an operable VTR/CVRS, ALQ-126B, ALR-67, CATM-9, targeting FLIR, LDT, KY-58, and chaff and flares when possible.

- c. Academic Training. Refer to MAWTS-1 Course Catalog.
- d. Simulator Training. None.
- e. Flight Training. (3 Flights, 3.9 Hours).

CAS-250                      1.3                      2 FA-18A/C/D A

Goal. Conduct day low threat CAS under FAC or FAC(A) control. Emphasis should be placed on mission planning, aircraft system management, attack parameters, delivery modes, designation techniques, information flow through the C<sup>3</sup> system, and adherence to CAS procedures and all FAC or FAC(A) instructions.

Requirement. Conduct day low threat CAS under FAC or FAC(A) control. Two deliveries using talk-on and two deliveries using either a visual or laser mark required for completion.

Mission Performance Standards

- (a) Accurately copies CAS brief from terminal controller.
- (b) Delivers weapons with effect on target within 15 seconds of TOT.
- (c) Delivers weapons only when cleared by the terminal controller.
- (d) Makes an accurate correction from mark or lead's hit.
- (e) Adheres to tactical abort parameters, when applicable.

Prerequisite. BAS-222.

Ordnance. 4 MK-82, 250 rds of 20 mm, 10 chaff, and 20 flares.

External Syllabus Support. FAC or FAC(A), 2 WP/RP/ILLUM/Smoke rds or laser designation platform. Live ordnance range.

CAS- 251                      1.3                      R 2 F/A-18A/C/D A

Goal. Conduct day medium/high threat CAS under FAC or FAC(A) control and evaluate CAS procedures. Emphasis should be placed on mission planning, aircraft system management, attack parameters, delivery modes, designation techniques, information flow through the C<sup>3</sup> system, and adherence to CAS procedures and all FAC or FAC(A) instructions.

Requirement. Conduct day medium/high threat CAS under FAC or FAC(A) control. Two deliveries using either a visual or laser mark required for completion.

Mission Performance Standards

- (a) Accurately copies CAS brief from terminal controller.
- (b) Delivers weapons with effect on target within 15 seconds of TOT.
- (c) Delivers weapons only when cleared by the terminal controller.
- (d) Makes an accurate correction from mark or lead's hit.
- (e) Adheres to tactical abort parameters, when applicable.

Prerequisite. CAS-250, BAS-228.

Ordnance. 4 MK-82, 250 rds of 20 mm, 10 chaff, and 20 flares.

External Syllabus Support. FAC or FAC(A), 8 HE rds, 2 WP/RP/ILLUM/smoke rds or laser designation platform. Live ordnance range.

CAS-252

1.3                      2 FA-18A/C/D A NS

Goal. Conduct night low threat CAS under FAC or FAC(A) control. Emphasis should be placed on mission planning, aircraft system management, attack parameters, delivery modes, designation techniques, information flow through the C<sup>3</sup> system, and adherence to CAS procedures and all FAC or FAC(A) instructions.

Requirement. Conduct night low threat CAS under FAC or FAC(A) control. Two deliveries using talk-on and two deliveries using either a visual or laser mark required for completion.

Mission Performance Standards

- (a) Accurately copies CAS brief from terminal controller.
- (b) Delivers weapons with effect on target within 15 seconds of TOT.
- (c) Delivers weapons only when cleared by the terminal controller.
- (d) Makes an accurate correction from mark or lead's hit.
- (e) Adheres to tactical abort parameters, when applicable.

Prerequisite. BAS-226, CAS-250.

Ordnance. 4 MK-82, 250 rds of 20 mm, 10 chaff, and 20 flares.

External Syllabus Support. FAC or FAC(A), 2 WP/RP/ILLUM/Smoke rds or laser designation platform. Live ordnance range.

9. Armed Reconnaissance (AR)

a. Purpose. Develop proficiency in conducting AR missions.

b. General

(1) Emphasis should be placed on mission planning, mutual support, target acquisition/recognition/identification, target area tactics and information flow through the C<sup>3</sup> system.

(2) The commanding officer may authorize inert ordnance in lieu of live ordnance when necessary. Ensure required ordnance not available (TRK-

598) code is logged.

(3) Binoculars may be utilized for target acquisition during AR missions.

(4) Aircraft should be configured with an operable VTR/CVRS, ALQ-126B, ALR-67, CATM-9, targeting FLIR, LDT, KY-58, chaff, and flares when possible.

c. Academic Training. Refer to MAWTS-1 Course Catalog

d. Simulator Training. (1 period, 1.0 hour)

SAR-260                      1.0                      WTT S

Goal. Practice employment of the AGM-65E/F Maverick. Emphasis should be placed on capabilities and limitations, cockpit displays, and employment techniques.

Requirement. Employ the AGM-65E/F against a surface target. Three launches with a ground based laser and three launches with an on board laser required for completion.

Prerequisite. AGM-65E/F Maverick lecture from the MAWTS-1 ASP.

e. Flight Training. (2 Flights, 2.6 Hours).

AR-261                      1.3                      R 2 FA-18A/C/D A

Goal. Conduct day med/high altitude armed reconnaissance. Emphasis should be placed on mission planning, target precedence, search pattern, attack parameters, delivery modes, designation techniques, and information flow through the C<sup>3</sup> system.

Requirement. Conduct med/high altitude armed reconnaissance to locate, plot, and destroy targets of opportunity.

Mission Performance Standards

- (a) Able to conduct visual reconnaissance of assigned area and detect targets.
- (b) Able to plot targets with an error less than 300 meters.
- (c) Performs target attacks appropriate for scenario.
- (d) Delivers weapons with effects on target.
- (e) Adheres to TACSOP valid delivery parameters.

Prerequisite. SAR-260.

Ordnance. 1 Laser or IR Maverick (live or captive), 4 MK-20 or CBU-99/100, 10 chaff and 20 flares.

External Syllabus Support. Live ordnance range (CBUs authorized).

AR-262                      1.3                      R 2 FA-18A/C/D A (NS)

Goal. Conduct night high / med altitude armed reconnaissance. Emphasis should be placed on mission planning, target precedence, search pattern, attack parameters, delivery modes,

designation techniques, and information flow through the C<sup>3</sup> system.

Requirement. Conduct high/med altitude armed reconnaissance to locate, plot, and destroy targets of opportunity.

Mission Performance Standards

- (a) Able to conduct visual reconnaissance of assigned area and detect targets.
- (b) Able to plot targets with an error less than 300 meters.
- (c) Performs target attacks appropriate for scenario.
- (d) Deliver weapons with effects on target.
- (e) Adheres to TACSOP valid delivery parameters.

Prerequisite. AR-261.

Ordnance. 1 Maverick (live or captive), 4 MK-82, 10 chaff and 20 flares.

External Syllabus Support. Live ordnance range.

10. Air Interdiction (AI)

a. Purpose. Develop proficiency in conducting AI missions.

b. General

(1) Emphasis should be placed on mission planning, tactical decision making, mutual support and target acquisition/destruction. Ordnance types may be substituted based on the mission, threat and to vary tactics and training requirements.

(2) The commanding officer may authorize inert ordnance in lieu of live ordnance when necessary. Ensure required ordnance not available (TRK-598) code is logged.

(3) Aircraft should be configured with an operable VTR/CVRS, ALQ-126B, ALR-67, CATM-9, targeting FLIR, LDT, KY-58, chaff, and flares when possible.

c. Academic Training. Refer to MAWTS-1 Course Catalog.

d. Simulator Training. None.

e. Flight Training. (3 Flights, 3.9 Hours)

AI-270

1.3

R 2 FA-18A/C/D A 1+ Adversaries

Goal. Conduct a day Air Interdiction (AI) mission against a target with air defenses. Emphasis should be placed on mission planning, tactical decision making, mutual support and target acquisition/destruction.

Requirement. Attack and destroy a surface target. Plan a strike route using a mission planning system. Use JMEMs to weaponize a specific target. Perform an INS update using the radar or FLIR. Execute ingress, ordnance delivery and egress tactics consistent with the threat.

Mission Performance Standards

- (a) Maintains briefed tactical formations on ingress/egress.
- (b) Recognizes and reacts appropriately to threats.
- (c) Delivers weapons on planned DMPI.
- (d) Adheres to TACSOP valid delivery parameters.

Prerequisite. BAS-222.

Ordnance. 4 MK-83, 20 chaff, and 10 flares.

External Syllabus Support. Live ordnance range.

AI-271

1.3                      2 FA-18A/C/D A NS

Goal. Conduct a night Air Interdiction (AI) mission against a target with air defenses. Emphasis should be placed on mission planning, tactical decision making, mutual support and target acquisition/destruction.

Requirement. Attack and destroy a surface target. Plan a strike route using a mission planning system. Use JMEMs to weaponize a specific target. Perform an INS update using the radar or FLIR. Execute ingress, ordnance delivery and egress tactics consistent with the threat.

Mission Performance Standards

- (a) Maintains briefed tactical formations on ingress/egress.
- (b) Recognizes and reacts appropriately to threats.
- (c) Delivers weapons on planned DMPI.
- (d) Adheres to TACSOP valid delivery parameters.

Prerequisite. BAS-226, AI-270.

Ordnance. 4 MK-83, 20 chaff, and 10 flares.

External Syllabus Support. One tanker (if AAR required).

AI-272

1.3                      R 4 FA-18A/C/D A

Goal. Conduct a division day Air Interdiction (AI) mission against a target with air defenses. Emphasis should be placed on mission planning, tactical decision making, mutual support and target acquisition/destruction.

Requirement. Attack and destroy a surface target In a division attack formation. Plan a strike route using a mission planning system. Use JMEMs to weaponize a specific target. Perform an INS update using the radar or FLIR. Execute ingress, ordnance delivery and egress tactics consistent with the threat.

Mission Performance Standards

- (a) Maintains briefed tactical formations on ingress/egress.
- (b) Recognizes and reacts appropriately to threats.
- (c) Delivers weapons on planned DMPI.
- (d) Adheres to TACSOP valid delivery parameters.

Prerequisite. AI-271.

Ordinance. 2 LGTR, 20 chaff, and 10 flares.

External Syllabus Support. Live ordnance range, one tanker (if AAR required).

# 11. Tactical Aerial Reconnaissance (TAR)

a. Purpose. Develop proficiency at multi-sensor imagery reconnaissance with the Advanced Tactical Airborne Reconnaissance System (ATARS).

## b. General

(1) Emphasis should be placed on integrated mission planning, search profiles, sensor employment, and information flow through the C3 system. Both pre-planned collection and targets of opportunity techniques will be executed.

(2) After completion of this phase, aircrew may be designated TAR qualified by their commanding officer.

(3) ATARS aircraft must be configured with two operable Digital Tape Recorders, ATARS sensors, and APG-73 RUG 2. TAR-282 also requires an AN/ARQ-56 Data Link Pod and coordination with a Marine Tactical Exploitation Group (TEG) or similarly equipped ground imagery exploitation system.

(4) Aircraft should also be configured with an operable CVRS, ALQ-126B, ALR-67, chaff, flares, KY-58, and CATM-9 when possible.

c. Academic Training. Refer to MAWTS-1 Course Catalog.

d. Simulator Training. None.

e. Flight Training. (3 Flights, 3.9 Hours)

<u>TAR-280</u>	<u>1.3</u>	<u>R 1/2 FA-18D(RC)</u>	<u>A (NS)</u>
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Goal. Introduce Electro-optical (EO) and Infrared (IR) imagery collection using the Advanced Tactical Airborne Reconnaissance System (ATARS). Emphasis will be placed on mission planning, target acquisition, and employment of EO and IR sensors while executing a day armed reconnaissance mission.

Requirement. Conduct high and low altitude Armed Reconnaissance as a section to detect and collect EO/IR imagery of both pre-planned targets and targets of opportunity.

## Mission Performance Standards

(a) Conduct armed reconnaissance of named areas of interest and detect targets.

(b) Collect preplanned imagery using all EO and IR sensors. A minimum of one vertical, one high oblique, and one low oblique EO image will be collected. Complementary IR imagery will be collected simultaneously when applicable.

- (c) Collect imagery of targets of opportunity with all EO and IR sensors.
- (d) Execute target attacks and collect post-strike imagery for BDA.

Prerequisites. AR-261.

Ordinance. 6 Mk-76, 10 chaff, 10 flares.

External Syllabus Support. None.

TAR-281

1.3 R 1/2 FA-18D(RC) A NS

Goal. Introduce Synthetic Aperture Radar (SAR) imagery collection while employing ATARS. Emphasis will be placed on mission planning, target acquisition, and employment of both SAR and the Infrared Line Scanner (IRLS) in a night armed reconnaissance mission.

Requirement. Conduct night armed reconnaissance to locate targets and collect both SAR and IR imagery of pre-planned targets and targets of opportunity.

Mission Performance Standards

- (a) Conduct armed reconnaissance of named areas of interest and detect targets.
- (b) Collect pre-planned imagery using both SAR and IRLS. A minimum of two SAR strip maps, and two SAR spot maps are required. Complementary IR imagery will be collected of the same targets.
- (c) Collect imagery of targets of opportunity using both SAR and IRLS.
- (d) Perform target attacks and collect post-strike imagery for BDA.

Prerequisites. AR-262, TAR-281.

Ordinance. 6 Mk-76, 10 chaff, 10 flares.

External Syllabus Support. None.

TAR-282

1.3 1/2 FA-18D(RC) A (NS)

Goal. Introduce employment of the AN/ARQ-56 ATARS Datalink Pod. Emphasis will be placed on mission planning, sensor employment, and datalink of time-critical imagery while executing a medium threat AI mission.

Requirement. Execute a medium threat AI mission, collect pre-planned targets and targets of opportunity, and datalink time-critical imagery to the TEG.

Mission Performance Standards

- (a) Collect preplanned imagery enroute using EO, IR, and SAR sensors.



- (b) Collect pre-strike and post-strike imagery of assigned DMPIs.
- (c) Conduct imagery review inflight and datalink time-sensitive imagery to the TEG.

Prerequisites. TAR-280, 281.

Ordinance. 6 Mk-76 or LGTR, 10 chaff, 10 flares.

External Syllabus Support. TEG or similarly equipped ground imagery exploitation system required.

## 12. Field Carrier Landing Practice/Expeditionary Qualification (FCLP/EQ)

- a. Purpose. Practice for carrier operations or qualify for EAF operations.
- b. General. Each FCLP simulator is a prerequisite for the corresponding training flight when qualification is aboard a CV. Each FCLP flight is a training flight for CV qualification in the 600 level.
- c. Ground Training. IAW LSO NATOPS.
- d. Simulator Training. (1 Period, 1.0 Hour).

SFCLP/SEQ-290    1.0                    R   WTT   S

Goal. Conduct simulated carrier landings using Case I and Case III procedures. Emphasis should be placed on pattern procedures, landing technique, deck procedures, and emergency procedures.

Requirement. Perform a Case I and two Case III recoveries to multiple carrier landings. Four passes required for completion. Simulator must be monitored by an LSO.

External Syllabus Support. LSO.

- e. Flight Training. (2 Flights, 2.6 Hours).

FCLP/EQ-291    1.3                    R   1   FA-18A/C/D   A

Goal. Practice day FCLP procedures or qualify for day expeditionary landing operations.

Requirement. For FCLPs perform touch and go's under the control of an LSO. Six touch and go's required for completion. For EQ, perform four touch and go's, an arrested landing, and a launch from an expeditionary airfield.

### Mission Performance Standards

- (a) Fly 5 Fair [(OK)] passes IAW LSO NATOPS Criteria.
- (b) Responds quickly and safely to all communications and communications out signals from LSO if required.

Prerequisite. SFCLP/SEQ-290.

Ordinance. None.

External Syllabus Support. LSO.

FCLP/EQ-292      1.3              R 1 FA-18A/C/D A N

Goal. Practice night FCLP procedures or qualify for night expeditionary landing operations.

Requirement. For FCLPs perform touch and go's under the control of an LSO. Six touch and go's required for completion. For EQ, perform four touch and go's, an arrested landing, and a launch from an expeditionary airfield.

Mission Performance Standards

- (a) Fly 5 Fair [(OK)] passes IAW LSO NATOPS Criteria.
- (b) Responds quickly and safely to all communications and communications out signals from LSO if required.

Prerequisite. FCLP/EQ-291.

Ordinance. None.

External Syllabus Support. LSO.

132. 300 LEVEL TRAINING (FA-18A/C/D)1. Basic Air-to-Surface (BAS)

a. Purpose. Develop proficiency in basic air to surface ordnance delivery skills.

b. General

(1) Emphasis should be placed on sensor target acquisition, designation techniques, delivery modes and attack parameters.

(2) Aircraft should be configured with an operable VTR/CVRS, ALQ-126B, ALR-67, targeting FLIR, LDT, CATM-9, KY-58, chaff, and flares.

c. Academic Training. Refer to MAWTS-1 Course Catalog

d. Simulator Training. (2 Periods, 2.0 Hours).

SBAS-320            1.0            R WTT S

Goal. Practice employment of JDAM and JSOW. Emphasis should be placed on weapon capabilities and limitations, cockpit displays, and employment techniques.

Requirement. Plan and conduct multiple ordnance deliveries. Minimum of three PP and three TOO deliveries for each weapon.

SBAS-321            1.0            R WTT S

Goal. Practice employment of the AGM-88 HARM. Emphasis should be placed on weapon capabilities and limitations, cockpit displays, and employment techniques.

Requirement. Employ the AGM-88 against a ground based emitter. Three PB shots, three TOO shots, a HARM designation, and a manually modified entry (MME) required for completion.

Prerequisite. HARM Modes of Operation and Displays lecture from the MAWTS-1 ASP.

e. Flight Training. (4 Flights, 5.2 Hours).

BAS-322            1.3            R 2 FA-18A/C/D A (NS)

Goal. Practice section "buddy lase" and "buddy bomb" ordnance deliveries. Emphasis should be placed on mutual support and target area tactics.

Requirement. Conduct ordnance deliveries using a targeting FLIR and LDT. Conduct three target attacks utilizing "buddy lase" tactics and three target attacks utilizing "buddy bombing" tactics for completion.

Mission Performance Standards

- (a) Able to acquire/illuminate target on sensor.
- (b) Able to maintain proper geometry for target illumination until weapons impact.

(c) Achieves a CEP within the TACSOP valid bomb accuracy parameters.

Prerequisite. SBAS-220, BAS-224, 225.

Ordnance. 2 LGTR (6 MK-76), 20 chaff, and 10 flares.

External Syllabus Support. LASER capable range.

BAS-323

1.3                      2+ FA-18A/C/D A (NS)

Goal. Practice level and low angle low drag ordnance delivery and strafe using the FA-18 computed delivery modes. Emphasis should be placed on target area tactics and attack parameters.

Requirement. Conduct level and low angle low drag ordnance delivery and strafe on a raked range using Auto Slew and CCIP. Six runs level, six runs low angle low drag, and four runs low angle strafe required for completion.

Mission Performance Standards

- (a) Able to perform safe separation maneuvers and achieve suitable stand-off for frag avoidance.
- (b) Achieves a CEP within the TACSOP valid bomb accuracy parameters.
- (c) A minimum of 10% hits for strafe.

Prerequisite. LAT qualified.

Ordnance. 12 MK-76, 250 rds of 20 mm, 10 chaff, and 20 flares.

External Syllabus Support. Raked Range with target scoring.

BAS-324

1.3                      2+ FA-18A/C/D A (NS)

Goal. Practice ordnance delivery using a radar designation. Emphasis should be placed on target acquisition and target area tactics.

Requirement. Conduct ordnance delivery using radar expand modes. Three attacks utilizing the OAP method for target acquisition/designation. Six runs required for completion.

Mission Performance Standards

- (a) Able to locate target/OAP using APG-65/73 air-to-ground modes.
- (b) Achieves a CEP within the TACSOP valid bomb accuracy parameters.

Prerequisite. None.

Ordnance. 6 MK-76, 10 chaff, and 20 flares.

External Syllabus Support. None.

BAS-325            1.3            FA-18A/C/D A (NS)

Goal. Conduct FAC(A)/SCAR escort. Emphasis should be placed on detection and suppression of surface-to-air and air-to-air threats and mutual support.

Requirement. Fly as a FAC(A)/SCAR escort and suppress any detected threats.

Mission Performance Standards

- (a) Detect surface-to-air and air-to-air threats.
- (b) Suppress/destroy surface-to-air and air-to-air threats.

Prerequisite. None.

Ordinance. CATM-9, captive HARM, 2 MK-82, 10 chaff, 20 flares, and CATM-7/120.

External Syllabus Support. Ground based emitter and/or 1 adversary.

2. Air Combat Maneuvering (ACM)

a. Purpose. To refine skills developed in the 200 Level ACM stage.

b. General

(1) All general notes from the 200 Level ACM stage apply to this stage.

(2) Events in this stage do not require an ACTI unless a non-ACM qualified aircrew participates. If a non-ACM qualified aircrew participates in an event in this stage, the ACTI requirements contained in MCO 3500.14 and 200 Level ACM stage descriptions apply.

(3) Aircraft should be configured with an operable VTR/CVRS, ALQ-126B, ALR-67, CATM-9, KY-58, and chaff and flares when possible.

c. Academic Training. Refer to MAWTS-1 Course Catalog

d. Simulator Training. (2 Periods, 2.0 Hours).

SACM-330            1.0            WTT/TOFT S

Goal. Conduct section attacks against an unknown number of bogies with SAR-1 missiles. Emphasis should be placed on section intercept procedures, maintaining proper formation, targeting and sorting, BVR weapons employment, and standardized communications.

Requirement. With a minimum of 40 NM separation, the fighters commence the intercept at medium altitude. The bogies commence the intercept at any altitude and airspeed, maneuvering. Bogey presentations will be a level 3 simulation IAW the USMC FA-18 TACSOP. Fighter weapons control status is tight with PHID criteria set by flight lead according to theater of operation. Four intercepts required for completion.

Mission Performance Standards

- (a) Arrives at a valid forward quarter or rear quarter weapons envelope.
- (b) Takes valid shots.

Prerequisite. ACM-245E.

SACM-331

1.0                      R   WTT/TOFT   S

Goal. Conduct intercept against bogies with SAR-1 and IR-3 missiles in an EA environment.

Requirement. With a minimum of 40 NM separation, the fighters commence the intercept at medium altitude. The bogies commence the intercept at any altitude and airspeed, maneuvering. Bogies should use self-protect jamming techniques or be screened by a stand-off jammer. Fighter weapons control status is tight with PHID criteria set by flight lead according to theater of operation. Three intercepts required for completion.

Mission Performance Standards

- (a) Executes proper radar mechanics in a EA environment.
- (b) Recognizes threat tactics and different jamming techniques.
- (c) Takes valid shots.
- (d) Timeline awareness.

Prerequisite. ACM-242.

e. Flight Training. (7 Flights, 9.1 Hours).

ACM-332

1.3                      2 FA-18A/C vs Unk Adversaries      (NS)

Goal. Conduct an OCA (Sweep) mission against an unknown number of bogies with SAR-1 and IR-3 missiles. Emphasis should be placed on section intercept procedures, maintaining proper formation, targeting and sorting, valid weapons employment, and standardized communication.

Requirement. With a minimum of 40 NM separation, the fighters commence the intercept at medium altitude. Bandits commence the intercept at any altitude and airspeed, maneuvering. Bandits present a level 3 bandit simulation IAW the USMC FA-18 TACSOP. Fighter weapons control status is tight with PHID criteria set by flight lead according to theater of operation. Three runs required for completion.

Mission Performance Standards

- (a) Maintains mutual support.
- (b) Executes proper radar mechanics.
- (c) Targets as directed.
- (d) Recognizes threat tactics.
- (e) Takes valid shots.
- (f) Timeline awareness.

Prerequisite. SACM-330.

Ordinance. CATM-9, 20 chaff, 10 flares, and CATM-7/120.

External Syllabus Support. Two or more adversaries.

ACM-333

1.3 R 2 FA-18A/C/D vs 2+ Dissimilar Adversaries A

Goal. Conduct section OCA (Escort) attacks against an unknown number of bogies with SAR-1 and IR-3 missiles. Emphasis should be placed on section intercept procedures, maintaining proper formation, targeting and sorting, VID weapons employment, and standardized communications.

Requirement. With a minimum of 40 NM separation, the fighters commence the OCA (Escort) intercept at medium altitude. The bogies commence the intercept at any altitude and airspeed, maneuvering. Bogies present a level 3 simulation IAW the USMC FA-18 TACSOP. Fighter weapons control status is tight with a PHID criteria set by flight lead according to theater of operation. Three intercepts required for completion. Two of the three must be VID.

Mission Performance Standards

- (a) Maintains mutual support.
- (b) Executes proper radar mechanics.
- (c) Targets as directed.
- (d) Recognizes threat tactics.
- (e) Takes valid shots.
- (f) Timeline awareness.

Prerequisite. ACM-245E, SACM-330.

Ordinance. CATM-9, 20 chaff, 10 flares, and CATM-7/120.

External Syllabus Support. Two or more dissimilar adversaries.

ACM-334

1.3 R 4/2 FA-18A/C/D vs Unknown Adversaries A (NS)

Goal. Conduct a DCA (Point Defense) mission against an unknown number of adversaries with SAR-1 and/or IR-3 missiles. Emphasis should be placed on commit criteria, reset criteria, desired engagement zone, targeting/sorting, valid weapons employment, and standardized communications.

Requirement. One defined vulnerability period required for completion. Fighter weapons control status is tight with PHID criteria set by flight lead according to theater of operation. Adversaries present a level 3 or 4 bandit simulation IAW the USMC FA-18 TACSOP. On one run, PID criteria will not be satisfied until after planned weapons employment range.

Mission Performance Standards

- (a) Maintains mutual support.
- (b) Executes proper radar mechanics.
- (c) Targets as directed.
- (d) Recognizes threat tactics.

- (e) Takes valid shots.
- (f) Timeline awareness.
- (g) Tactical decision making IAW mission objectives.

Prerequisite. ACM-245E, SACM-330.

Ordinance. CATM-9, 20 chaff, 10 flares, and CATM-7/120.

External Syllabus Support. Two or more adversaries.

ACM-335

1.3 4/2 FA-18A/C vs 2+ Dissimilar Adversaries A

Goal. Conduct an OCA (Screen) mission against an unknown number of bogies with SAR-1 and/or IR-3 missiles. Emphasis should be placed on section intercept procedures, maintaining proper formation, targeting and sorting, VID weapons employment, and standardized communications.

Requirement. With a minimum of 40 NM separation, the fighters commence the OCA (Screen) intercept at medium altitude. The bogies commence the intercept at any altitude and airspeed, maneuvering. Adversaries present a level 3 or 4 bandit simulation IAW the USMC FA-18 TACSOP. Fighter weapons control status is tight with PHID criteria that prevent weapons employment until a VID. Three intercepts required for completion. Two of the three must be VID.

Mission Performance Standards

- (a) Maintains mutual support.
- (b) Executes proper radar mechanics.
- (c) Targets as directed.
- (d) Recognizes threat tactics.
- (e) Takes valid shots.
- (f) Timeline awareness.
- (g) Tactical decision making IAW mission objectives.

Prerequisite. ACM-245E, SACM-330.

Ordinance. CATM-9, 20 chaff, 10 flares, and CATM-7/120.

External Syllabus Support. Two or more adversaries.

ACM-336

1.3 4/2 FA-18A/C vs 2+ Adversaries A (NS)

Goal. Conduct a DCA (HVAAP) mission against an unknown number of bogies with SAR-1 and/or IR-3 missiles. Emphasis should be placed on commit criteria, reset criteria, desired engagement zone, targeting/sorting, valid weapons employment, and standardized communications.

Requirement. One defined vulnerability period required for completion. Fighter weapons control status is tight with PHID criteria set by flight lead according to theater of operation. Adversaries present a level 3 or 4 bandit simulation IAW the USMC FA-18 TACSOP. On one run, PID criteria will not be satisfied until after planned weapons employment range.



Mission Performance Standards

- (a) Maintains mutual support.
- (b) Executes proper radar mechanics.
- (c) Targets as directed.
- (d) Recognizes threat tactics.
- (e) Takes valid shots.
- (f) Timeline awareness.
- (g) Tactical decision making IAW mission objectives.

Prerequisite. ACM-245E, SACM-330.

Ordinance. CATM-9, 20 chaff, 10 flares, and CATM-7/120.

External Syllabus Support. Two or more adversaries.

ACM-337

1.3 4/2 FA-18A/C vs 2+ Adversaries A (NS)

Goal. Conduct section or division attacks against an unknown number of adversaries with SAR-1 and/or IR-3 missiles in an EA environment.

Requirement. With a minimum of 40 NM separation, the fighters commence the intercept at medium altitude. The adversaries commence the intercept at any altitude and airspeed, maneuvering. Adversaries should use self-protect jamming techniques or be screened by a stand-off jammer. Adversaries present a level 3 or 4 bandit simulation IAW the USMC FA-18 TACSOP. Fighter weapons control status is tight with PHID criteria set by flight lead according to theater of operation. Three intercepts required for completion.

Mission Performance Standards

- (a) Executes proper radar mechanics in a EA environment.
- (b) Recognizes threat tactics and different jamming techniques.
- (c) Maintains mutual support.
- (d) Executes proper radar mechanics.
- (e) Targets as directed.
- (f) Recognizes threat tactics.
- (g) Takes valid shots.
- (h) Timeline awareness.
- (i) Tactical decision making IAW mission objectives.

Prerequisite. ACM-245E, SACM-330, 331.

Ordinance. CATM-9, 20 chaff, 10 flares, and CATM-7/120.

External Syllabus Support. Two adversaries with self-protect jamming equipment or two adversaries and one stand-off jammer.

ACM-338

1.3 4 FA-18A/C/D vs 2+ Dissimilar Adversaries A (NS)

Goal. Introduce division OCA (Self Escort Strike) attacks against an unknown number of adversaries with SAR-1 and/or IR-3 missiles. Emphasis should be placed on division intercept procedures, maintaining proper formation, targeting and sorting, VID weapons employment, and standardized communications.

Requirement. With a minimum of 40 NM separation, the fighters commence the intercept at medium altitude. The bogies commence the intercept at any altitude and airspeed, maneuvering. Adversaries present a level 3 or 4 bandit simulation IAW the USMC FA-18 TACSOP. Fighter weapons control status is tight with PHID criteria set by flight lead according to theater of operation. Three intercepts required for completion, with at least one requiring a VID.

Mission Performance Standards

- (a) Maintains mutual support.
- (b) Executes proper radar mechanics.
- (c) Targets as directed.
- (d) Recognizes threat tactics.
- (e) Takes valid shots.
- (f) Timeline awareness.
- (g) Tactical decision making IAW mission objectives.

Prerequisite. ACM-245E, SACM-330.

Ordnance. CATM-9, 20 chaff, 10 flares, and CATM-7/120.

External Syllabus Support. Two or more dissimilar adversaries.

4. Close Air Support (CAS)

a. Purpose. Develop proficiency in performing CAS missions.

b. General

(1) Emphasis should be placed on mission planning, aircraft system management, attack parameters, delivery modes, designation techniques, information flow through the C<sup>3</sup> system, and adherence to CAS procedures and all FAC or FAC(A) instructions.

(2) The commanding officer may authorize heavy inert ordnance in lieu of live ordnance when necessary. Ensure required ordnance not available (TRK-598) code is logged.

(3) Aircraft should be configured with an operable VTR/CVRS, ALQ-126B, ALR-67, CATM-9, targeting FLIR, LDT, KY-58, and chaff and flares when possible.

c. Academic Training. Refer to MAWTS-1 Course Catalog.

d. Simulator Training. (1 period, 1.0 hour).

SCAS-350      1.0      WTT/TOFT    S

Goal. Type 2 CAS Procedures and use of the CAS page.

Requirement. Conduct Type 2 CAS. Emphasis on systems management and communications. Three attacks utilizing JDAM, three attacks utilizing LGBs and three attacks utilizing Laser Maverick for completion.

e. Flight Training. (3 Flights, 3.9 Hours).

CAS-3511.3R 2 FA-18A/C/D A NS

Goal. Conduct night low threat CAS under FAC(A) control. Emphasis should be placed on mission planning, aircraft system management, attack parameters, delivery modes, designation techniques, information flow through the C<sup>3</sup> system, and adherence to CAS procedures and all FAC(A) instructions.

Requirement. Conduct night low threat CAS under FAC(A) control. Two deliveries using talk-on and two deliveries using either a visual or laser mark required for completion.

Mission Performance Standards

- (a) Accurately copies CAS brief from terminal controller.
- (b) Delivers weapons with effects on target within 15 seconds of TOT.
- (c) Delivers weapons only when cleared by the terminal controller.
- (d) Makes an accurate correction from mark or lead's hit.
- (e) Adheres to tactical abort parameters, when applicable.

Prerequisite. None.

Ordinance. 4 BDU-45, 250 rds of 20 mm, 4 LUU-2, 10 chaff, and 20 flares.

External Syllabus Support. FAC(A), 2 WP marks or laser designation platform, and 4 Illum rds. Inert/live ordnance range.

CAS-3521.3R 2 FA-18A/C/D A NS

Goal. Conduct night medium/high threat CAS under FAC or FAC(A) control and evaluate CAS procedures. Emphasis should be placed on mission planning, aircraft system management, attack parameters, delivery modes, designation techniques, information flow through the C<sup>3</sup> system, and adherence to CAS procedures and all FAC or FAC(A) instructions.

Requirement. Conduct night medium/high threat CAS under FAC or FAC(A) control. Two deliveries using either a visual or laser mark required for completion.

Mission Performance Standards

- (a) Accurately copies CAS brief from terminal controller.
- (b) Delivers weapons with effects on target within 15 seconds of TOT.
- (c) Delivers weapons only when cleared by the terminal controller.
- (d) Makes an accurate correction from mark or lead's hit.
- (e) Adheres to tactical abort parameters, when applicable.

Prerequisite. CAS-252.

Ordinance. 4 MK-82, 250 rds of 20 mm, 4xLUU-2, 10 chaff, and 20 flares.

External Syllabus Support. FAC or FAC(A), 8 HE rds, 2

WP/RP/ILLUM/Smoke marks or laser designation platform, and 4 Illum rds. Live ordnance range.

CAS-353            1.3            2 FA-18A/C/D A (NS)

Goal. Conduct Low threat Urban CAS under FAC or FAC(A) control. Emphasis should be placed on CAS procedures, mission planning, attack parameters, delivery modes, designation techniques, and information flow through the C<sup>3</sup> system.

Requirement. Conduct Low threat Urban CAS under FAC or FAC(A) control. Two deliveries using either a visual/laser mark or talk-on required for completion.

Mission Performance Standards

- (a) Accurately copies CAS brief from terminal controller.
- (b) Delivers weapons with effects on target within 15 seconds of TOT.
- (c) Delivers weapons only when cleared by the terminal controller.
- (d) Makes an accurate correction from mark or lead's hit.
- (e) Adheres to tactical abort parameters, when applicable.

Prerequisite. CAS-351.

Ordnance. 6 MK-76, 2 LGTR, 250 rds of 20 mm, 4xLUU-2, 10 chaff, and 20 flares.

External Syllabus Support. FAC or FAC(A), 8 HE rds, 2 WP/RP/ILLUM/Smoke marks or laser designation platform, and 4 Illum rds.

5. Armed Reconnaissance (AR)

a. Purpose. Develop proficiency in conducting AR missions.

b. General

(1) Emphasis should be placed on mission planning, mutual support, target acquisition/recognition/identification, target area tactics and information flow through the C<sup>3</sup> system.

(2) The commanding officer may authorize inert ordnance in lieu of live ordnance when necessary. Ensure required ordnance not available (TRK-598) code is logged.

(3) Binoculars may be utilized for target acquisition during AR missions.

(4) Aircraft should be configured with an operable VTR/CVRS, ALQ-126B, ALR-67, CATM-9, targeting FLIR, LDT, KY-58, chaff, and flares when possible.

c. Academic Training. Refer to MAWTS-1 Course Catalog.

d. Simulator Training. None.

e. Flight Training. (4 Flights, 5.2 Hours).

AR-3601.3                    R 2 FA-18A/C/D A

Goal. Conduct day med/high altitude PGM armed reconnaissance. Emphasis should be placed on mission planning, target precedence, search pattern, attack parameters, delivery modes, designation techniques, and information flow through the C<sup>3</sup> system.

Requirement. Conduct day med/high altitude PGM armed reconnaissance to locate, plot, and destroy targets of opportunity.

Mission Performance Standards

- (a) Able to conduct visual reconnaissance of assigned area and detect targets.
- (b) Able to plot targets with an error less than 300 meters.
- (c) Performs target attacks appropriate for scenario.
- (d) Delivers weapons with effects on target.

Prerequisite. AR-261.

Ordnance. 1 Laser or IR Maverick (live or captive), 1 GBU-10/12/ or 16, 10 chaff and 20 flares.

External Syllabus Support. Live ordnance range (laser authorized).

AR-3611.3                    R E 2 or 4 FA-18A/C/D A NS

Goal. Conduct night med/high altitude PGM armed reconnaissance. Emphasis should be placed on mission planning, target precedence, search pattern, attack parameters, delivery modes, designation techniques, and information flow through the C<sup>3</sup> system.

Requirement. Conduct night med/high altitude PGM armed reconnaissance to locate, plot, and destroy targets of opportunity.

Mission Performance Standards

- (a) Able to conduct visual reconnaissance of assigned area and detect targets.
- (b) Able to plot targets with an error less than 300 meters.
- (c) Performs target attacks appropriate for scenario.
- (d) Delivers weapons with effects on target.

Prerequisite. AR-262, 360.

Ordnance. 1 Laser or IR Maverick (live or captive), 1 GBU-10/12/ or 16, 10 chaff and 20 flares.

External Syllabus Support. Inert/live ordnance range (laser authorized).

AR-3621.3                    2+ FA-18A/C/D A (NS)

Goal. Conduct day or night Strike Coordination And

Reconnaissance (SCAR). Emphasis should be placed on locating targets in accordance with a target precedence list, notifying armed reconnaissance assets of target locations and current threat, and proper information flow through the C<sup>3</sup> system.

Requirement. Coordination of one element of armed reconnaissance required for completion.

Mission Performance Standards

- (a) Locates targets with an error less than 300 meters.
- (b) Prioritizes targets according to target precedence list.
- (c) Assists armed reconnaissance assets in locating targets and coordinates target attacks.

Prerequisite. AR-261.

Ordnance. 7 2.75-inch WP rockets, 2 MK-82, 10 chaff, and 20 flares.

External Syllabus Support. None.

AR-363

1.3                      2 FA-18A/C/D A (NS)

Goal. Conduct assault support escort. Emphasis should be placed on mission planning, target precedence, search pattern, attack parameters, delivery modes, designation techniques, and information flow through the C<sup>3</sup> system.

Requirement. Conduct assault support along a route to locate, and destroy targets of opportunity in a low or medium threat environment.

Mission Performance Standards

- (a) Locates and attacks targets.
- (b) Informs assault support flight of threat.

Prerequisite. LAT qualified.

Ordnance. CATM-9, 4 BDU-45, 10 chaff, and 20 flares.

External Syllabus Support. Minimum 1 Helicopter/Assault support package.

6. Air Interdiction (AI)

a. Purpose. Develop proficiency in conducting AI missions.

b. General

(1) Emphasis should be placed on mission planning, tactical decision making, mutual support and target acquisition/destruction. Ordnance types may be substituted based on the mission, threat and to vary tactics and training requirements.

(2) The commanding officer may authorize inert ordnance in lieu of live ordnance when necessary. Ensure required ordnance not available (TRK-598) code is logged.

(3) Aircraft should be configured with an operable VTR/CVRS, ALQ-126B, ALR-67, CATM-9, targeting FLIR, LDT, KY-58, chaff, and flares when possible.

- c. Academic Training. Refer to MAWTS-1 Course Catalog.
- d. Simulator Training. None
- e. Flight Training. (3 flights, 3.9 hours)

AI-370                      1.3                      2 FA-18A/C/D vs 2+ Adversaries A NS

Goal. Conduct a section, night Air Interdiction (AI) mission against a target with air defenses. Emphasis should be placed on air-to-surface and air-to-air mission planning, tactical decision making, mutual support and target acquisition/destruction.

Requirement. Attack and destroy a surface target. Plan a strike route using a mission planning system. Use JMEMs to weaponize a specific target. Perform an INS update using the radar or FLIR. Execute ingress, ordnance delivery and egress tactics consistent with the threat.

Mission Performance Standards

- (a) Maintains briefed tactical formations on ingress/egress.
- (b) Recognizes and reacts appropriately to threats.
- (c) Delivers weapons on planned DMPI.
- (d) Adheres to TACSOP valid delivery parameters.

Prerequisite. AI-271.

Ordnance. 1 GBU-10/12/ or 16, 20 chaff, and 10 flares.

External Syllabus Support. One or more adversaries and one tanker (if AAR required). Live ordnance and laser safe range.

AI-371                      1.3                      4 FA-18A/C/D A NS

Goal. Conduct a division, night Air Interdiction (AI) mission against a target with air defenses. Emphasis should be placed on air-to-surface mission planning, tactical decision making, mutual support and target acquisition/destruction.

Requirement. Attack and destroy a surface target. Plan a strike route using a mission planning system. Use JMEMs to weaponize a specific target. Perform an INS update using the radar or FLIR. Execute ingress, ordnance delivery and egress tactics consistent with the threat.

Mission Performance Standards

- (a) Maintains briefed tactical formations on ingress/egress.
- (b) Recognizes and reacts appropriately to threats.
- (c) Delivers weapons on planned DMPI.
- (d) Adheres to TACSOP valid delivery parameters.

Prerequisite. AI-271, 370.

Ordnance. 4 MK-83 inert, 20 chaff, and 10 flares.

External Syllabus Support. one tanker (if AAR required).

AI-372

1.3 R 4 FA-18A/C/D vs 2+ Adversaries A

Goal. Conduct a division, day Air Interdiction (AI) mission against a target with air defenses. Emphasis should be placed on air-to-surface and air-to-air mission planning, tactical decision making, mutual support and target acquisition/destruction.

Requirement. Attack and destroy a surface target. Plan a strike route using mission planning systems. Use JMEMs to weaponeer a specific target. Perform an INS update using the radar or FLIR. Execute ingress, ordnance delivery and egress tactics consistent with the threat.

Mission Performance Standards

- (a) Maintains briefed tactical formations on ingress/egress.
- (b) Recognizes and reacts appropriately to threats.
- (c) Delivers weapons on planned DMPI.
- (d) Adheres to TACSOP valid delivery parameters.

Prerequisite. AI-272.

Ordinance. 4 MK-83, CATM-9, 20 chaff, and 10 flares.

External Syllabus Support. One or more adversaries and one tanker (if AAR required). Live ordnance range.

9. Forward Air Controller (Airborne) FAC(A)

a. Purpose. Develop proficiency in Forward Air Controller (Airborne) [FAC(A)].

b. General

(1) Prior to beginning this stage of training, pilots shall be designated as a section leader by the commanding officer and WSOs shall be complete with all 200 level events.

(2) Nonqualified aircrew will fly FAC(A)-380 through FAC(A)-387E with a MAWTS-1 certified FAC(A)I designated by the commanding officer. The FAC(A)I may be in the FAC(A) or escort aircraft. The FAC(A)I may simulate the ground FAC if one is not available.

(3) The commanding officer may designate aircrew as FAC(A) qualified upon successful completion of this stage of training through FAC(A)-387E.

(4) A FAC(A) qualified crew (Pilot and WSO) designated by the commanding officer must be in the aircraft during any syllabus sortie controlling CAS within close proximity to friendly troops.

c. Academic Training. Refer to MAWTS-1 Course Catalog.

d. Simulator Training. None.

e. Flight Training. (8 Flights, 10.4 Hours).



FAC(A)-3801.3                    FA-18D and 1 Escort A (NS)

Goal. Introduce FAC(A) procedures in a low threat environment.

Requirement. Perform visual reconnaissance of three separate targets on a tactical range. Plot targets on a 1:50,000 map and prepare target briefs. Control 4 separate attacks by attack aircraft utilizing low threat tactics. Use appropriate CAS briefing and control procedures. Perform authentication procedures. Deliver or coordinate marking rounds on target. Demonstrate the ability to provide timely, accurate corrections for CAS aircraft, and the ability to provide talk-ons. Provide BHA. Four controls required for completion.

Mission Performance Standards

- (a) Locates targets and plots with an error less than 100 meters.
- (b) Provides accurate verbal description during "talk-on" attacks.
- (c) If required, marks the target with a CEP less than 100 meters.
- (d) Visually acquires CAS assets and provides timely control and corrections.

Prerequisite. Academic requirements complete.

Ordinance. 7 2.75-inch WP rockets, 10 chaff, and 10 flares.

External Syllabus Support. One or two fixed-wing CAS elements and a ground FAC. Indirect Fire Support (IDFS) asset with 4 WP rds if IDFS is to be used for marking or suppression.

FAC(A)-3811.3                    R FA-18D and 1 Escort A (NS)

Goal. Introduce FAC(A) procedures in an medium to high threat environment.

Requirement. Perform reconnaissance of three separate targets on a tactical range. Plot targets on a 1:50,000 map and prepare target briefs. Control at least 4 separate attacks by CAS aircraft. Deliver or coordinate marking rounds on target 30 seconds prior to TOT using appropriate medium threat tactics. Demonstrate ability to provide timely, accurate corrections for CAS aircraft. Provide BDA. Four controls required for completion.

Mission Performance Standards

- (a) Locates targets and plots with an error less than 100 meters.
- (b) Marks the target with a CEP less than 100 meters.
- (c) Employs tactics, techniques, and procedures (TTPs) commensurate with the briefed threat.
- (d) Visually acquires CAS assets and provides timely control and corrections.

Prerequisite. FAC(A)-380. If artillery or mortars are used for marking, completion of FAC(A)-382 is required prior to the conduct of this sortie.

Ordnance. 7 2.75-inch WP rockets, 10 chaff, and 10 flares.

External Syllabus Support. One to two fixed-wing CAS elements and a ground FAC. IDFS asset with 4 WP rds and 8 HE rds if IDFS is to be used for marking or suppression.

FAC(A)-382

1.3 R FA-18D and 1 Escort A (NS)

Goal. Introduce day naval gunfire/mortar/artillery airspot.

Requirement. Perform visual reconnaissance on tactical targets, plot on a 1:50,000 map and deliver a call-for-fire brief. Emphasis on accurate call-for-fire communications and adjustment procedures and appropriate tactics, techniques, and procedures (TTPs) for the threat scenario. One low threat adjust fire, one immediate suppression, one mark and SEAD mission, and one high threat mark and SEAD mission are required for completion.

Mission Performance Standards

- (a) Locates targets and plots with an error less than 100 meters.
- (b) Employs proper communications format with the firing unit.
- (c) Provides timely and accurate corrections to the firing unit. Requires four rounds or less to achieve a bracket sufficient for a fire for effect (FFE). Completes an immediate suppression CFF within 60 seconds of receiving the mission from the FAC/FO.

Prerequisite. None.

Ordnance. 10 chaff and 10 flares.

External Syllabus Support. Naval gunfire/mortar/artillery unit and a minimum of 10 HE rds and 2 WP rds. A ground FAC or FO.

FAC(A)-383

1.3 FA-18D and 1 Escort A NS

Goal. Practice night naval gunfire/mortar/artillery airspot.

Requirement. Perform visual reconnaissance on tactical targets, plot on a 1:50,000 map and prepare a call-for-fire brief. Emphasis on accurate call-for-fire communications and adjustment procedures and appropriate tactics, techniques and procedures (TTPs) for the threat scenario. One low threat adjust fire, one immediate suppression, one mark and SEAD mission, and one high threat mark and SEAD mission. At least one mission must include coordinated illumination.

Mission Performance Standards

- (a) Locates targets and plots with an error less than 100 meters.
- (b) Employs proper communications format with the firing unit.
- (c) Provides timely and accurate corrections to the firing unit. Requires four rounds or less to achieve a bracket sufficient for a FFE. Completes an immediate suppression CFF

within 60 seconds of receiving the mission from the FAC/FO.  
(d) Employs TTPs appropriate for the threat.

Prerequisite. FAC(A)-382.

Ordinance. 4 LUU-2/19, 10 chaff and 10 flares.

External Syllabus Support. Naval gunfire/mortar/artillery unit and a minimum of 10 HE rds, 2 WP rds, and 8 Illum rds. A FAC or FO.

#### FAC(A)-384

##### 1.3 FA-18D and 1 Escort A (NS)

Goal. Introduce FAC(A) procedures controlling rotary wing CAS in all threat environments.

Requirement. Perform visual reconnaissance of three targets on a tactical range. Plot the targets and prepare target briefs. Control 4 separate attacks by attack helicopters using low threat tactics. Use appropriate rotary wing CAS control procedures, and authentication as required. Deliver or coordinate marking rounds and provide accurate, timely corrections. Demonstrate the ability to use "talk-ons" in lieu of ordnance marks. If conducted at night, use appropriate flare tactics for target illumination.

##### Mission Performance Standards

- (a) Locates targets and plots with an error less than 100 meters.
- (b) Employs proper communications format with the firing unit.
- (c) Provides timely and accurate corrections to the firing unit. Requires four rounds or less to achieve a bracket sufficient for a FFE. Completes an immediate suppression CFF within 60 seconds of receiving the mission from the FAC/FO.
- (d) Employs TTPs appropriate for the threat.

Prerequisite. FAC(A)-383.

Ordinance. 7 2.75-inch WP rockets, 10 chaff, and 10 flares. 4 LUU-2/19 (if conducted at night).

External Syllabus Support. Two rotary wing CAS aircraft and a ground FAC. IDFS asset with 8 HE rds and 4 WP rds if IDFS is to be used for marking.

#### FAC(A)-385

##### 1.3 R FA-18D and 1 Escort A NS

Goal. Practice night FAC(A) procedures in a low threat environment.

Requirement. Perform reconnaissance of three separate targets on a tactical range. Plot targets on a 1:50,000 map and prepare target briefs. Control at least 4 separate attacks by CAS aircraft. Deliver or coordinate marking rounds on target 30 seconds prior to TOT using appropriate threat tactics. Demonstrate ability to provide timely, accurate corrections for CAS aircraft. Provide BDA. Four controls required for completion. Use flare tactics for target illumination.

Mission Performance Standards

- (a) Locates targets and plots with an error less than 100 meters.
- (b) Provides accurate verbal description during "talk-on" attacks.
- (c) If required, marks the target with a CEP less than 100 meters.
- (d) Visually acquires CAS assets and provides timely control and corrections.

Prerequisites. FAC(A)-380. If rotary-wing CAS assets are used, completion of FAC(A)-384 is required. If artillery or mortars are used for target marking or threat suppression, FAC(A)-382 is required.

Ordnance. 7 2.75-inch WP rockets, 10 chaff, and 10 flares.  
4 LUU-2/19.

External Syllabus Support. One to two CAS elements and a ground FAC. IDFS asset with 4 WP rds and 8 Illum rds if IDFS is to be used for marking or suppression.

FAC(A)-386

1.3 FA-18D and 1 Escort A NS

Goal. Practice night FAC(A) procedures in a medium to high threat environment.

Requirement. Perform reconnaissance of three separate targets on a tactical range. Plot targets on a 1:50,000 map and prepare target briefs. Control at least 4 separate attacks by rotary wing and/or fixed wing CAS aircraft. Deliver or coordinate marking rounds on target 30 seconds prior to TOT using appropriate threat tactics. Use flare tactics for target illumination if threat allows. Demonstrate ability to provide timely, accurate corrections for CAS aircraft. Provide BDA. Four controls required for completion.

Mission Performance Standards

- (a) Locate and plot targets with an error less than 100 meters.
- (b) Mark the target with a CEP less than 100 meters.
- (c) Visually acquire CAS assets and provide timely control and corrections.
- (d) Employ appropriate TTPs commensurate with threat scenario.

Prerequisite. FAC(A)-381, 385. If rotary-wing CAS assets are utilized, completion of FAC(A)-384 is required. If artillery or mortars are used for marking or suppression, completion of FAC(A)-383 is required.

Ordnance. 7 2.75-inch WP rockets, 20 chaff, and 10 flares.  
4 LUU-2/19.

External Syllabus Support. One to two CAS elements and a ground FAC. IDFS asset with 8 HE rds, 4 WP rds, and 8 Illum rds if IDFS is to be used for marking or suppression.

FAC(A)-387E      1.3      FA-18D and 1 Escort A (NS)

Goal. Practice supporting arms integration in any threat environment.

Requirement. Perform visual reconnaissance and plot three targets on a 1:50,000 map. Prepare CAS briefs. Employ appropriate TTPs to control coordinated attacks on the targets, managing air space as required to achieve maximum effect on target, aircraft deconfliction, and deconfliction of ordnance effects (i.e. fragmentation, forward firing ordnance, etc). At least one target attack should incorporate simultaneous target attacks by two or more dissimilar assets. This evaluation sortie should be flown in a MAGTF level operation if possible.

Mission Performance Standards

- (a) Locate targets and plots with an error less than 100 meters.
- (b) Coordinate target attacks using appropriate TTPs.
- (c) If required, mark the target with a CEP less than 100 meters.
- (d) Visually acquire CAS assets and provides timely control and corrections.

Prerequisite. Completion of all previous FAC(A) sorties.

Ordnance. 7 2.75-inch WP rockets, 10 chaff, and 10 flares. 4 LUU-2/19 (if conducted at night).

External Syllabus Support. Two or more dissimilar supporting arms assets with a minimum of 8 HE rds and 4 WP rds, either fixed wing or rotary wing CAS aircraft and artillery and/or mortars.

9. Tactical Air Coordinator (Airborne) TAC(A)

a. Purpose. Develop proficiency in Tactical Air Coordinator (Airborne) [TAC(A)].

b. General

(1) This phase of training is designed for experienced aircrew.

(2) Prior to commencing the TAC(A) syllabus, aircrew must be FAC(A) qualified. Non-qualified aircrew will fly TAC(A)-390 and TAC(A)-391E with a MAWTS-1 certified TAC(A)I designated by the commanding officer. The TAC(A)I may be in the escort aircraft.

(3) The commanding officer may designate aircrew as TAC(A) qualified upon successful completion of this phase of training through TAC(A)-391E.

c. Academic Training. Refer to MAWTS-1 Course Catalog.

d. Simulator Training. None.

e. Flight Training. (2 Flights, 2.6 Hours).

TAC(A)-390            1.3            R FA-18D and 1 Escort A (NS)

Goal. Introduce TAC(A) procedures.

Requirement. Integrate CAS with a single terminal controller (FAC/FAC(A)). Manage airspace and multiple ingressing/egressing aircraft. Conduct airborne relay of target briefs. Minimum of two CAS elements required for completion.

Mission Performance Standards

- (a) Able to accurately copy immediate JTAR.
- (b) Able to coordinate timely CAS in response to immediate request.
- (c) Able to pass CAS aircraft BDA via the C<sup>3</sup> system.

Prerequisite. FAC(A)-387, FAC(A) qualified.

Ordinance. None.

External Syllabus Support. Two CAS elements and one terminal controller (FAC / FAC(A)).

TAC(A)-391E            1.3            FA-18D and 1 Escort A (NS)

Goal. Practice TAC(A) procedures with multiple terminal controllers.

Requirement. Perform coordination of attack aircraft and multiple terminal controllers. Receive attack briefings from the FAC/FAC(A) and assign appropriate CAS aircraft. Coordinate target mark and control with the FAC/FAC(A). Manage assigned airspace and provide command and control system with essential elements of information. Perform authentication procedures (as required).

Mission Performance Standards

- (a) Able to accurately copy immediate JTAR.
- (b) Able to coordinate timely CAS in response to immediate request.
- (c) Able to pass CAS aircraft BDA via the C<sup>3</sup> system.

Prerequisite. TAC(A)-390.

Ordinance. None.

External Syllabus Support. FAC, FAC(A), and one to four CAS elements.

133. 400 LEVEL TRAINING (FA-18A/C/D)1. Night Systems (NS)

a. Purpose. Develop proficiency using Night Vision Devices (NVDs) in the low altitude environment.

b. General

(1) A MAWTS-1 certified NSI pilot flight lead is required to fly with NON-NSQ(L) pilots for NS-410 through NS-412E in FA-18C aircraft. A MAWTS-1 certified NSI pilot flight lead and an NSI Pilot/WSO crewed with the NON-NSQ(L) aircrew are required for FA-18Ds.

(2) At the discretion of the commanding officer, NSQ(L) aircrew may fly any night or night optional event in the T&R with the aid of NVGs NSQ(L) aircrew may fly to a minimum altitude of 1000' AGL in low light conditions (lux less than 0.0022) and down to 300' AGL in high light conditions (lux greater than 0.0022).

(3) After the successful completion of NS-412, the aircrew is eligible to be designated NSQ(L) qualified by the commanding officer.

(4) NS-411 and NS-412E require that all members of the flight are LAT Qualified. Consult MCO P3500.14 for night LAT currency and altitude restrictions.

(5) Consult MCO P3500.14 for applicable light level and currency restrictions for NS sorties.

c. Academic Training. Refer to MAWTS-1 Course Catalog.

d. Simulator Training. None.

e. Flight Training. (3 flights, 3.9 hours).

NS-410                      1.3                      2 FA-18A/C/D A NS

Goal. Practice low altitude ingress, target acquisition and target attacks at night in the LAT environment.

Requirement. Conduct a section low level and section attacks. One low level and four section attacks on a raked range required for completion.

Mission Performance Standards

(a) Knows and understands visual illusions associated with NVD usage.

(b) Achieves a CEP within the TACSOP valid bomb accuracy parameters.

(c) Adheres to tactical abort parameters.

Prerequisite. NS-214E.

Ordinance. 6 MK-76, 10 chaff.

External Syllabus Support. Approved MTR, scored raked range.

NS-411                      1.3                      2 FA-18A/C/D A NS

Goal. Introduce night single ship conventional LAT using NVDs. Emphasis should be placed on LAT procedures using NVDs, communications, and maneuver techniques.

Requirement. As a single ship, perform descent to comfort level, straight and level, ridgeline crossings, and Nav/Hard/Break turns. Two circuits required for completion, the first circuit at CL no lower than 500 ft AGL and the remaining circuits at CL no lower than 300 ft AGL.

Mission Performance Standards

- (a) Knows and understands visual illusions associated with NVD usage.
- (b) Knows and understands mission cross check times.

Prerequisite. NS-410, LAT qualified.

Ordinance. None.

External Syllabus Support. Certified LAT course.

NS-412E                      1.3                      R 2 FA-18A/C/D A NS

Goal. Introduce night section 2 dimensional LAT using NVDs and evaluate Night Systems procedures.

Requirement. As a wingman, perform descent to comfort level, straight and level, turns, ridgeline crossings, night formations, and section attacks. Two circuits required for completion, the first circuit at CL no lower than 500 ft AGL and the remaining circuits at CL no lower than 300 ft AGL.

Mission Performance Standards

- (a) Able to maintain formation in the LAT environment.
- (b) Knows guidelines for NVD use outlined in Volume I.
- (c) Executes successful target attack and maintains mutual support.
- (d) Achieves a CEP within the TACSOP valid bomb accuracy parameters.
- (e) Adheres to tactical abort parameters.

Prerequisite. NS-411.

Ordinance. 6 MK-76, 10 chaff, 10 flares.

External Syllabus Support. Certified LAT course.

1. Air Combat Maneuvering (ACM)

- a. Purpose. Conduct advanced air-to-air missions.
- b. General

(1) All general notes from the 200 and 300 Level ACM stages apply to this stage.



(2) These sorties are designed to be flown by experienced and qualified aircrew.

- c. Academic Training. Refer to MAWTS-1 Course Catalog.
- d. Simulator Training. None.
- e. Flight Training. (6 Flights, 7.8 Hours).

ACM-430                      1.3                      1+ FA-18A/C/D A

Goal. Introduce the aerial gunnery pattern. Emphasis should be placed on pattern procedures, pipper control, firing technique, and postflight analysis.

Requirement. Conduct a dry or live fire aerial gunnery pattern. Eight runs on a maneuvering or nonmaneuvering banner/dart required for completion.

Mission Performance Standards

- (a) Able to achieve 10% hits.
- (b) Flies a safe consistent pattern.
- (c) Responds to range safety officer commands.

Prerequisite. ACM-245E.

Ordinance. 500 rds of 20 mm.

External Syllabus Support. One banner/dart tow aircraft.

ACM-431                      1.3                      2 FA-18A/C/D vs 2+ Adversaries A (NS)

Goal. Introduce aircrew to peacetime intercept and escort procedures. Emphasis should be placed on adherence to ICAO procedures, standing ROE, and appropriate tactics, techniques, and procedures.

Requirement. With a minimum of 40 NM separation, fighters commence intercept of bogies. Fighters perform a point defense/HVAA mission in a peacetime scenario with a weapons control status of tight. Bogies simulate fighter aircraft armed with SAR-1 and/or IR-3 missiles and having unknown ROE and intentions. Bogies commence intercepts at any altitude, subsonic, and non-maneuvering. Fighters intercept and escort bogies according to briefed procedures. On at least one intercept bogies demonstrate hostile intent. Two intercept and escorts required for completion.

Mission Performance Standards

- (a) Intercepts bogies and arrives in an offensive position.
- (b) Adheres to ICAO procedures and standing ROE.
- (c) Recognizes display of hostile intentions by bogies and react appropriately.

Prerequisite. ACM-245E.

Ordinance. CATM-9, 20 chaff, 10 flares, and CATM-7/120.

External Syllabus Support. Two or more adversaries.

ACM-432            1.3            2 FA-18A/C/D vs 1-2 Rotary Wing/Prop Aircraft A (NS)

Goal. Introduce aircrew to helicopter/prop aircraft attack. Emphasis should be placed on optimum weapons employment.

Requirement. Conduct visual attacks against helicopters/prop aircraft using appropriate captive air-to-air and simulated air-to-ground ordnance. One attack with a radar missile, one attack with the CATM-9, one attack with the air-to-air gun, one attack with the air-to-ground gun, and one attack with a GP bomb required for completion.

Mission Performance Standards

- (a) Maintains offensive position on adversary aircraft.
- (b) Valid air-to-air and air-to-ground weapons employment.

Prerequisite. ACM and LAT qualified.

Ordnance. CATM-9, 20 chaff, 10 flares, and CATM-7/120.

External Syllabus Support. One or more helicopters/prop aircraft.

ACM-433            1.3            4 FA-18A/C/D vs 2+ Dissimilar Adversaries A (NS)

Goal. Conduct Division OCA (Screen) attacks against an unknown number of bogies with SAR-1 and/or IR-3 missiles. Emphasis should be placed on division intercept procedures, maintaining proper formation, targeting and sorting, VID weapons employment, and standardized communications.

Requirement. With a minimum of 40 NM separation, the fighters commence the OCA (Screen) intercept at medium altitude. The adversaries commence the intercept at any altitude and airspeed, maneuvering. Adversaries present a level 3 or 4 bandit simulation IAW the USMC FA-18 TACSOP. Fighter weapons control status is tight with a PHID criteria that prevents weapons employment until a VID. Three intercepts required for completion.

Mission Performance Standards

- (a) Maintains mutual support.
- (b) Executes proper radar mechanics.
- (c) Targets as directed.
- (d) Recognizes threat tactics.
- (e) Takes valid shots.
- (f) Timeline awareness.
- (g) Tactical decision making IAW mission objectives.

Prerequisite. ACM-245E.

Ordnance. CATM-9, 20 chaff, 10 flares, and CATM-7/120.

External Syllabus Support. Two or more adversaries, TACTS range.

ACM-4341.34 FA-18A/C/D vs 2+ Dissimilar Adversaries A NS

Goal. Conduct a night division OCA (Sweep) mission against an unknown number of bogies with SAR-2 or AR-1 missiles.

Emphasis should be placed on division intercept procedures, maintaining proper formation, targeting and sorting, valid weapons employment, and standardized communications.

Requirement. Three runs required for completion. Adversaries present a level 3 or 4 bandit simulation IAW the USMC FA-18 TACSOP. Fighter weapons control status is tight with PHID criteria set by flight lead according to theater of operation.

Mission Performance Standards

- (a) Maintains mutual support.
- (b) Executes proper radar mechanics.
- (c) Targets as directed.
- (d) Recognizes threat tactics.
- (e) Takes valid shots.
- (f) Timeline awareness.
- (g) Tactical decision making IAW mission objectives.

Prerequisite. ACM-245E.

Ordinance. CATM-9, 20 chaff, 10 flares, and CATM-7/120.

External Syllabus Support. Two or more dissimilar adversaries, TACTS range.

ACM-4351.34 F-18A/C/D vs 2+ Adversaries A NS

Goal. Conduct a night division Area Defense or HVAA escort mission against an unknown number of adversaries with SAR-2 or AR-1 missiles. Emphasis should be placed on commit criteria, reset criteria, desired engagement zone, targeting/sorting, valid weapons employment, and standardized communications.

Requirement. One defined vulnerability period required for completion. Adversaries present a level 3 or 4 bandit simulation IAW the USMC FA-18 TACSOP. Fighter weapons control status is tight with PHID criteria set by flight lead according to theater of operation. On one run, PHID criteria will not be satisfied until after planned weapons employment range.

Mission Performance Standards

- (a) Maintains mutual support.
- (b) Executes proper radar mechanics.
- (c) Targets as directed.
- (d) Recognizes threat tactics.
- (e) Takes valid shots.
- (f) Timeline awareness.
- (g) Tactical decision making IAW mission objectives.

Prerequisite. ACM-338.

Ordinance. CATM-9, 20 chaff, 10 flares, and CATM-7/120.

External Syllabus Support. Two or more adversaries, TACTS range.

3. Armed Reconnaissance (AR)

a. Purpose. Conduct advanced AR missions.

b. General

(1) All general notes applicable to the 200 and 300 level AR stages apply here.

c. Academic Training. Refer to MAWTS-1 Course Catalog.

d. Simulator Training. None.

e. Flight Training. (2 Flights, 2.6 Hours).

AR-460                      1.3                      4 FA-18A/C/D A (NS)

Goal. Conduct division med/high altitude armed reconnaissance with the aid of a SCAR platform. Emphasis should be placed on mission planning, target precedence, search pattern, attack parameters, delivery modes, designation techniques, and information flow through the C<sup>3</sup> system.

Requirement. Conduct division med/high altitude PGM armed reconnaissance to locate, plot, and destroy targets of opportunity. Conduct battlefield handover with the SCAR platform.

Mission Performance Standards

- (a) Able to conduct visual reconnaissance of assigned area and detect targets.
- (b) Able to plot targets with an error less than 300 meters.
- (c) Performs target attacks appropriate for scenario.
- (d) Delivers weapons with effects on target.

Prerequisite. AR-261, 360.

Ordnance. 1 Laser or IR Maverick (live or captive), 4 MK-20, 10 chaff and 20 flares.

External Syllabus Support. Live ordnance range.

AR-461                      1.3                      4 F/A-18A/C/D A NS

Goal. Conduct night division med/high altitude armed reconnaissance. Emphasis should be placed on mission planning, target precedence, search pattern, attack parameters, delivery modes, designation techniques, and information flow through the C<sup>3</sup> system.

Requirement. Conduct night division med/high altitude armed reconnaissance to locate, plot, and destroy targets of opportunity.

Mission Performance Standards

- (a) Able to conduct visual reconnaissance of assigned area and detect targets.
- (b) Able to plot targets with an error less than 300 meters.
- (c) Performs target attacks appropriate for scenario.
- (d) Delivers weapons with effects on target.

Prerequisite. AR-460.

Ordnance. 1 Laser or IR Maverick (live or captive), 4 MK-82, 10 chaff and 20 flares.

External Syllabus Support. None.

#### 4. Air Interdiction (AI)

a. Purpose. Conduct advanced AI missions.

b. General

(1) All general notes applicable to the 200 and 300 level AI stages apply to this stage of training.

c. Academic Training. Refer to MAWTS-1 Course Catalog.

d. Simulator Training. None.

e. Flight Training. (3 Flights, 3.9 Hours).

#### AI-470      1.3    4 FA-18A/C/D vs    2+ Adversaries    A    NS

Goal. Conduct a night Air Interdiction (AI) mission against a target with integrated air defenses. Emphasis should be placed on air-to-surface and air-to-air mission planning, tactical decision making, mutual support and target acquisition/destruction.

Requirement. Attack and destroy a surface target. Plan a strike route using mission planning systems. Use JMEMs to weaponize a specific target. Perform an INS update using the radar or FLIR. Execute ingress, ordnance delivery and egress tactics consistent with the threat.

Mission Performance Standards

- (a) Maintains briefed tactical formations on ingress/egress.
- (b) Recognizes and reacts appropriately to threats.
- (c) Delivers weapons on planned DMPI.

Prerequisite. AI-372.

Ordnance. 2 LGTR, 20 chaff, and 10 flares.

External Syllabus Support. One tanker (if AAR required), 2 or more adversaries, EW range.

#### AI-471      1.3                      R    4+ FA-18A/C/D vs 2+ Adversaries A

Goal. Conduct a day Air Interdiction (AI) mission against a

target with integrated air defenses on an EW range simulating a high threat environment that includes bogies with SAR-1 and IR-3 missiles. Emphasis should be placed on air-to-surface and air-to-air mission planning, tactical decision making, mutual support and target acquisition/destruction.

Requirement. Attack and destroy a surface target. Plan a strike route using a mission planning system. Use JMEmS to weaponize a specific target. Perform an INS update using the radar or FLIR. Execute ingress, ordnance delivery and egress tactics consistent with the threat.

#### Mission Performance Standards

- (a) Maintains briefed tactical formations on ingress/egress.
- (b) Recognizes and reacts appropriately to threats.
- (c) Delivers weapons on planned DMPI.
- (d) Adheres to TACSOP valid delivery parameters.

Prerequisite. AI-372.

Ordnance. Minimum of 2 LGTR, CAGM-88, CATM-9, 20 chaff, 10 flares, and CATM-7/120.

External Syllabus Support. Two or more adversaries, EW Range and a tanker (if AAR required).

#### AI-472

#### 1.3 4+ FA-18A/C/D vs 2+ Adversaries A NS

Goal. Conduct a night Air Interdiction (AI) mission against a target with integrated air defenses on an EW range simulating a high threat environment that includes bogies with SAR-1 and IR-3 missiles. Emphasis should be placed on air-to-surface and air-to-air mission planning, tactical decision making, mutual support and target acquisition/destruction.

Requirement. Attack and destroy a surface target. Plan a strike route using a mission planning system. Use JMEmS to weaponize a specific target. Perform an INS update using the radar or FLIR. Execute ingress, ordnance delivery and egress tactics consistent with the threat.

#### Mission Performance Standards

- (a) Maintains briefed tactical formations on ingress/egress.
- (b) Recognizes and reacts appropriately to threats.
- (c) Delivers weapons on planned DMPI.
- (d) Adheres to TACSOP valid delivery parameters.

Prerequisite. AI-471.

Ordnance. Minimum of 2 LGTR, CAGM-88, CATM-9, 20 chaff, 10 flares, and CATM-7/120.

External Syllabus Support. Two or more adversaries, EW Range and a tanker (if AAR required).

#### 9. Forward Air Controller (Airborne) FAC(A)

- a. Purpose. To expose FA-18A/C pilots to Low Threat, Day and Night

Forward Air Controller (Airborne) [FAC(A)].

b. General

(1) This stage of training is designed for a designated division lead.

(2) Aircrew shall fly FAC(A)-480 and 481 with a MAWTS-1 certified FA-18D FAC(A)I in the flight who is proficient in all aspects of FAC(A). The FAC(A)I may simulate the ground FAC if one is not available.

(3) Upon completion of this stage of training FA-18A/C pilots shall not receive a FAC(A) qualification. This stage of training is intended to only offer an exposure to low threat FAC(A) procedures.

(4) Aircraft should be configured with an operable CVRS, TFLIR, LDT, ALQ-126B, ALR-67, chaff, flares, KY-58, and CATM-9 when possible.

c. Academic Training. Refer to MAWTS-1 Course Catalog.

d. Simulator Training. None.

e. Flight Training. (2 Flights, 2.6 Hours).

FAC(A)-480      1.3      R 1 FA-18A/C and 1 FA-18D Escort A

Goal. Expose FA-18A/C pilots to day FAC(A) procedures in a low threat environment.

Requirement. Perform visual reconnaissance of three separate targets on a tactical range. Plot targets on a 1:50,000 map and prepare target briefs. Control 4 separate attacks by attack aircraft utilizing low threat tactics. Use appropriate CAS briefing and control procedures. Perform authentication procedures. Deliver or coordinate marking rounds on target. Demonstrate the ability to provide timely, accurate corrections for CAS aircraft, and the ability to provide talk-ons. Provide BDA. Four controls required for completion.

Mission Performance Standards

- (a) Locates targets and plots with an error less than 300 meters.
- (b) Provides accurate verbal description during "talk-on" attacks.
- (c) Marks the target with a CEP less than 300 meters.
- (e) Visually acquires CAS assets and provides timely control and corrections.
- (f) Acquire target on FLIR and maintain laser illumination until CAS weapon impact plus 5 seconds.

Prerequisite. Designated division leader, academic requirements complete.

Ordinance. 7 2.75-inch WP rockets, 20 chaff, and 10 flares.

External Syllabus Support. Designated FA-18D FAC(A)I escort required. Two fixed wing LDT capable CAS sections. Ground FAC

FAC(A)-481

1.3

R 1 FA-18A/C and 1 FA-18D Escort A NS

Goal. Expose FA-18A/C pilots to night FAC(A) procedures in a low threat environment.

Requirement. Perform visual reconnaissance of three separate targets on a tactical range. Plot targets on a 1:50,000 map and prepare target briefs. Control 4 separate attacks by attack aircraft utilizing low threat tactics. Use appropriate CAS briefing and control procedures. Perform authentication procedures. Deliver or coordinate marking rounds on target. Demonstrate the ability to provide timely, accurate corrections for CAS aircraft, and the ability to provide talk-ons. Provide BDA. Four controls required for completion.

Mission Performance Standards

- (a) Locates targets and plots with an error less than 300 meters.
- (b) Provides accurate verbal description during "talk-on" attacks.
- (c) Marks the target with a CEP less than 300 meters.
- (d) Visually acquires CAS assets and provides timely control and corrections.
- (e) Acquire target on FLIR and maintain laser illumination until CAS weapon impact plus 5 seconds.
- (f) Correctly coordinates timing and location of battlefield illumination.

Prerequisite. FAC(A)-480.

Ordinance. 7 2.75-inch WP rockets, 20 chaff, and 10 flares, 4 LUU-2/19.

External Syllabus Support. Designated FA-18D FAC(A)I escort required. Two fixed wing LDT capable CAS sections. Ground FAC



140. 500 LEVEL INSTRUCTOR UNDER TRAINING (IUT)/SPECIFIC WEAPON DELIVERY (SWD) (FA-18A/C/D)

1. Instructor Under Training (IUT). IUT training shall be conducted in the FA-18 FRS using the CNO approved IUT syllabus.

2. Low Altitude Tactics Instructor (LATI)

a. Purpose. To certify an FA-18 Pilot as an instructor capable of safely conducting ground and airborne instruction of the FA-18 low altitude tactics flight syllabus outlined in MCO P3500.15.

b. General. Aircrew shall be LAT qualified and current prior to beginning this stage of training.

c. Academic Training. Refer to the MAWTS-1 Course Catalog.

d. Simulator Training. (1 Period, 1.0 Hour).

SLATI-510E      1.0      R WTT S

Goal. Develop proficiency in briefing, performing, chasing basic LAT procedures from the WTT console, and debriefing LAT tactics, techniques, and procedures.

Requirement. Reference the MAWTS-1 Course Catalog for the LATI POI.

e. Flight Training. (3 Flights, 3.9 Hours)

LATI-511E      1.3      R 2 FA-18A/C/D A

Goal. Develop proficiency in briefing, performing, chasing, and debriefing advanced LAT procedures.

Requirement. Reference the MAWTS-1 Course Catalog for the LATI POI.

LATI-512E      1.3      R 2 FA-18A/C/D A

Goal. Develop proficiency in briefing, performing, chasing, and debriefing advanced LAT procedures completed on a tactical LAT circuit.

Requirement. Reference the MAWTS-1 Course Catalog for the LATI POI.

LATI-513E      1.3      R 2 FA-18A/C/D A

Goal. Develop proficiency in briefing, performing, chasing, and debriefing advanced LAT procedures completed as a section on a tactical LAT circuit.

Requirement. Reference the MAWTS-1 Course Catalog for the LATI POI.

2. Air Combat Tactics Instructor (ACTI)

a. Purpose. To certify FA-18 aircrew as instructors capable of safely

conducting ground and airborne instruction of the FA-18 BFM and ACM flight syllabus.

b. General. Aircrew shall be ACM qualified. Pilots shall be a designated section lead and WSOs shall be of equivalent experience level.

c. Academic Training. Refer to the MAWTS-1 Course Catalog.

d. Simulator Training. None.

e. Flight Training. (3 Flights, 3.9 hours)

ACTI-520E      1.3      R 2 FA-18A/C/D A

Goal. Demonstrate proficiency in briefing, executing, and debriefing Basic Fighter Maneuvering at an instructor level. Emphasis is placed on flight leadership, execution, and instructional techniques

Requirement. Reference the MAWTS-1 Course Catalog for the ACTI POI.

ACTI-521E      1.3      R 2 FA-18A/C/D A

Goal. Demonstrate proficiency in briefing, executing, and debriefing section engaged maneuvering at an instructor level. Emphasis is placed on flight leadership, execution, and instructional techniques

Requirement. Reference the MAWTS-1 Course Catalog for the ACTI POI.

ACTI-522E      1.3      R 2 FA-18A/C/D A

Goal. Demonstrate proficiency in briefing, executing, and debriefing section tactics at an instructor level. Emphasis is placed on flight leadership, execution, and instructional techniques

Requirement. Reference the MAWTS-1 Course Catalog for the ACTI POI.

#### 4. Night System Instructor (NSI)

a. Purpose. To certify an FA-18 aircrew as an instructor capable of safely conducting ground and airborne instruction of the FA-18 night systems flight syllabus, outlined in MCO P3500.15.

b. General. Aircrew shall be NS(L) qualified. Pilots shall be a designated division lead and WSOs shall be of equivalent experience level.

c. Academic Training. Refer to the MAWTS-1 Course Catalog.

d. Simulator Training. None.

e. Flight Training. (3 flights, 3.9 hours)

NSI-530E      1.3      R 2 FA-18A/C/D A NS

Goal. Demonstrate proficiency in briefing, instructing,

executing, and debriefing a formation and air-to-air intercept mission with emphasis on night systems management and section operations with night vision devices.

Requirement. Reference the MAWTS-1 Course Catalog for the NSI POI.

NSI-531E            1.3            R 2 FA-18A/C/D A NS

Goal. Demonstrate tactical proficiency in planning, briefing, instructing, executing, and debriefing a night Air Interdiction mission in a medium to high threat environment that includes and air-to-air threat. Emphasis on mission planning, attack parameters, self-escort fighter gameplan, delivery modes, formation considerations, and target acquisition methods using NVDs.

Requirement. Reference the MAWTS-1 Course Catalog for the NSI POI.

NSI-532E            1.3            R 2 FA-18A/C/D A NS

Goal. Demonstrate proficiency in briefing, instructing, chasing, and debriefing basic night LAT maneuvers and section LAT target attacks.

Requirement. Reference the MAWTS-1 Course Catalog for the NSI POI.

#### 5. Forward Air Controller (Airborne) Instructor (FAC(A)I)

a. Purpose. To certify FA-18 aircrew as a Forward Air Controller (Airborne) Instructor capable of conducting ground and airborne instruction of the FAC(A) mission and capable of safely controlling CAS in close proximity to friendly troops. Emphasis will be placed on demonstration of ability to coordinate simultaneous FW and RW CAS, Artillery, or NSFS, while working for a TACP and operating with a MACCS.

b. General. Pilots shall be a designated division lead and WSOs shall be of equivalent experience level.

c. Academic Training. Refer to the MAWTS-1 Course Catalog.

d. Simulator Training. None.

e. Flight Training. (3 flights, 3.9 hours)

FAC(A)I-540E        1.3            R 2 FA-18A/C/D A (NS)

Goal. Demonstrate proficiency in briefing, instructing, executing, and debriefing FAC(A) procedures in a low threat environment.

Requirement. Reference the MAWTS-1 Course Catalog for the FAC(A)I POI.

FAC(A)I-541E        1.3            R 2 FA-18A/C/D A (NS)

Goal. Demonstrate proficiency in briefing, instructing, executing, and debriefing FAC(A) procedures in a med/high

threat environment.

Requirement. Reference the MAWTS-1 Course Catalog for the FAC(A)I POI.

FAC(A)I-542E    1.3                    R   2 FA-18A/C/D   A   NS

Goal. Demonstrate proficiency in briefing, instructing, executing, and debriefing night FAC(A) procedures in a low or med/high threat environment.

Requirement. Reference the MAWTS-1 Course Catalog for the FAC(A)I POI.

6. Tactical Air Coordinator (Airborne) Instructor (TAC(A)I)

a. Purpose. To certify an FA-18D aircrew as a Tactical Air Coordinator (Airborne) Instructor capable of conducting ground and airborne instruction of the TAC(A) mission. Emphasis is on the ability to coordinate with the GCE, coordinate mission assignments with the DASC and TACP's, and airspace management.

b. General. Pilots shall be a designated division lead and WSOs shall be of equivalent experience level.

c. Academic Training. Refer to the MAWTS-1 Course Catalog.

d. Simulator Training. None.

e. Flight Training. (1 flight, 1.3 hours)

TAC(A)I-550E    1.3                    R   FA-18D   A   (NS)

Goal. Demonstrate proficiency in briefing, instructing, executing, and debriefing TAC(A) in a MAGTF/combined operations scenario in a med/high threat environment.

Requirement. Reference the MAWTS-1 Course Catalog for the TAC(A)I POI.

6. Aerial Specific Weapons Delivery (ASWD)

a. Purpose. To track proficiency in air-to-air gunnery and air-to-air missile employment.

b. General

(1) Emphasis should be placed on safe and effective employment of air-to-air weapons system.

(2) Since air-to-air weapons employment involves live firing, flight leads, lead safes, and tractor aircrew will closely monitor aircrew for any unsafe tendencies.

(3) Due to the dynamic nature of employing air-to-air weapons systems, commanding officers will ensure each ASWD brief includes detailed discussion of avoiding airborne debris and towed targets after air-to-air weapons employment.

(4) In order to perform proper post flight analysis, all aircraft

participating in ASWD sorties require an operable VTR/CVRS.

- c. Academic Training. None.
- d. Simulator Training. None.
- e. Flight Training. (2 Flights, 2.6 Hours).

<u>ASWD-560</u>	<u>1.3</u>	<u>1+ FA-18A/C/D A</u>
<p><u>Goal</u>. Introduce aerial gunnery (circular pattern). Emphasis should be placed on pattern procedures, pipper control, firing technique, and postflight analysis.</p> <p><u>Requirement</u>. Conduct a dry or live fire aerial gunnery pattern. Eight runs on a maneuvering or non-maneuvering banner/dart required for completion.</p> <p><u>Prerequisite</u>. None.</p> <p><u>Mission Performance Standards</u></p> <ul style="list-style-type: none"> <li>(a) Able to achieve 10% hits.</li> <li>(b) Flies a consistent pattern.</li> <li>(c) Responds to range safety officer commands.</li> </ul> <p><u>Ordinance</u>. 500 rds of 20 mm.</p> <p><u>External Syllabus Support</u>. One banner/dart tow aircraft, live aerial gunnery range.</p>		
<u>ASWD-561</u>	<u>1.3</u>	<u>2 FA-18A/C/D A</u>
<p><u>Goal</u>. Practice aerial gunnery (forward quarter pattern) and evaluate firing technique.</p> <p><u>Requirement</u>. Conduct a live fire aerial gunnery (forward quarter pattern). Eight runs on a maneuvering or non-maneuvering banner/dart required for completion.</p> <p><u>Mission Performance Standards</u></p> <ul style="list-style-type: none"> <li>(a) Able to achieve 10% hits.</li> <li>(b) Flies a consistent pattern.</li> <li>(c) Responds to range safety officer commands.</li> </ul> <p><u>Prerequisite</u>. ASWD-560 completed.</p> <p><u>Ordinance</u>. 500 rds of 20 mm.</p> <p><u>External Syllabus Support</u>. One banner/dart tow aircraft, live aerial gunnery range.</p>		
<u>ASWD-562</u>	<u>1.3</u>	<u>2 FA-18A/C/D A</u>
<p><u>Goal</u>. Track proficiency in employment of an AIM-9</p> <p><u>Requirement</u>. Fire an AIM-9 against an airborne target.</p> <p><u>Prerequisite</u>. None.</p>		

Ordnance. 1 AIM-9M.

External Syllabus Support. Missile test range and airspace control agency. Surface search and aerial search radar platform, (EP-3, E-2C, etc). One BQM, AQM, or TALD with IR augmentation package.

ASWD-563      1.3              2 FA-18A/C/D A

Goal. Track proficiency in employment of an AIM-7

Requirement. Fire an AIM-7 against an airborne target.

Prerequisite. None.

Ordnance. 1 AIM-7M/H.

External Syllabus Support. Missile test range and airspace control agency. Surface search and aerial search radar platform, (EP-3, E-2C, etc). One BQM, AQM, or TALD with radar augmentation package.

ASWD-564      1.3              2 FA-18A/C/D A

Goal. Track proficiency in employment of an AIM-120

Requirement. Fire an AIM-120 against an airborne target.

Prerequisite. None.

Ordnance. 1 AIM-120A/B/C.

External Syllabus Support. Missile test range and airspace control agency. Surface search and aerial search radar platform, (EP-3, E-2C, etc). One BQM, AQM, or TALD with radar augmentation package.

### 3. Surface Specific Weapons Delivery (SSWD)

a. Purpose. Track specific weapons delivery.

b. General

(1) These events are to be used for tracking purposes only.

(2) No CRP is assigned to these sorties.

(3) Other training codes in the 200, 300, and 400 levels should be logged, in addition to the 500 level code, for core skill proficiency or CRP increase.

c. Academic Training. None.

d. Simulator Training. None.

e. Flight Training. (19 Flights, 22.7 Hours).

SSWD-570      1.3              R 2 FA-18A/C/D A (N)

Goal. Track proficiency in dropping live MK-82, 83, or 84 bombs.

Requirement. Must drop one bomb for completion.

Prerequisite. None.

Ordinance. At least one MK-82, 83, or 84 bomb.

External Syllabus Support. Live ordnance range.

SSWD-571      1.3              2 FA-18A/C/D A (NS)

Goal. Track proficiency in firing the M61A1 20mm Gun in at a surface target.

Requirement. Must successfully employ the gun on two separate runs against a surface target for completion.

Prerequisite. None.

Ordinance. At least 250 rnds 20mm.

External Syllabus Support. Live strafing range.

SSWD-572      1.3              2 FA-18A/C/D A (NS)

Goal. Track proficiency in dropping live or inert CBU-99/100 Rockeye.

Requirement. Must drop one Rockeye for completion.

Prerequisite. None.

Ordinance. At least one Rockeye.

External Syllabus Support. Live CBU range.

SSWD-573      1.3              2 FA-18A/C/D A (NS)

Goal. Track proficiency in dropping MK-77 Napalm Canister munition.

Requirement. Must drop one MK-77 Napalm Canister for completion.

Prerequisite. None.

Ordinance. At least one MK-77 Napalm Canister.

External Syllabus Support. Live ordnance range.

SSWD-574      1.3              2 FA-18A/C/D A (NS)

Goal. Track proficiency in shooting live or inert 5.0" or 2.75" rockets.

Requirement. Must shoot one pod of rockets for completion.

Prerequisite. None.

Ordnance. At least four 5" or seven 2.75" rocket.

External Syllabus Support. Live or inert ordnance range.

SSWD-575      1.3              2 FA-18A/C/D A (NS)

Goal. Track proficiency in employing battlefield illumination.

Requirement. Must shoot two illumination rockets or drop two LUU-2/19 flares for completion.

Prerequisite. None.

Ordnance. At least four 5" or seven 2.75" illumination rockets and/or 4 LUU-2/19.

External Syllabus Support. Inert ordnance range.

SSWD-576      1.3              2 FA-18C/D A (NS)

Goal. Track proficiency in captive carry AGM-65F IR Maverick employment.

Requirement. Functional captive AGM-65F IR Maverick.

Prerequisite. None.

Ordnance. At least captive AGM-65F IR Maverick.

External Syllabus Support. None.

SSWD-577      1.3              2 FA-18C/D A (NS)

Goal. Track proficiency in captive carry AGM-65E LASER Maverick employment.

Requirement. Functional captive AGM-65E LASER Maverick.

Prerequisite. None.

Ordnance. At least captive AGM-65E LASER Maverick.

External Syllabus Support. None.

SSWD-578      1.3              2 FA-18C/D A (NS)

Goal. Track proficiency in shooting the AGM-65F IR Maverick.

Requirement. Must shoot one AGM-65F IR Maverick.

Prerequisite. None.

Ordnance. At least one AGM-65F IR Maverick.

External Syllabus Support. Live Surface-to-Air missile range.



<u>SSWD-579</u>	<u>1.3</u>	<u>2 FA-18C/D A (NS)</u>
<u>Goal.</u> Track proficiency in shooting the AGM-65E LASER Maverick.		
<u>Requirement.</u> Must shoot one AGM-65E LASER Maverick.		
<u>Prerequisite.</u> None.		
<u>Ordnance.</u> At least one AGM-65E LASER Maverick.		
<u>External Syllabus Support.</u> Live Surface-to-Air missile range that is laser safe.		
<u>SSWD-580</u>	<u>1.3</u>	<u>2 FA-18C/D A (NS)</u>
<u>Goal.</u> Track proficiency in dropping laser guided bombs.		
<u>Requirement.</u> Must drop one GBU-10, 12, 16 or 24, or an LGTR for completion.		
<u>Prerequisite.</u> None.		
<u>Ordnance.</u> At least one GBU-10, 12, 16, 24 or an LGTR.		
<u>External Syllabus Support.</u> Live or Inert ordnance range, laser safe range.		
<u>SSWD-581</u>	<u>1.3</u>	<u>2 FA-18C/D A (NS)</u>
<u>Goal.</u> Track proficiency in captive carry of a JDAM.		
<u>Requirement.</u> Captive carry one JDAM.		
<u>Prerequisite.</u> None.		
<u>Ordnance.</u> One captive JDAM.		
<u>External Syllabus Support.</u> None.		
<u>SSWD-582</u>	<u>1.3</u>	<u>2 FA-18C/D A (NS)</u>
<u>Goal.</u> Track proficiency in delivering JDAM.		
<u>Requirement.</u> Must deliver one JDAM.		
<u>Prerequisite.</u> None.		
<u>Ordnance.</u> One JDAM.		
<u>External Syllabus Support.</u> Live ordnance range.		
<u>SSWD-583</u>	<u>1.3</u>	<u>2 FA-18C/D A (NS)</u>
<u>Goal.</u> Track proficiency in captive carry of a JSOW.		
<u>Requirement.</u> Captive carry one JSOW.		
<u>Prerequisite.</u> None.		

Ordnance. One captive JSOW.

External Syllabus Support. None.

SSWD-584      1.3              2 FA-18C/D A (NS)

Goal. Track proficiency in delivering JSOW.

Requirement. Must deliver one JSOW.

Prerequisite. None.

Ordnance. One JSOW.

External Syllabus Support. Live ordnance range.

SSWD-585      1.3              2 FA-18C/D A (NS)

Goal. Track proficiency in captive carry of AGM-88 HARM.

Requirement. Functional captive AGM-88 HARM.

Prerequisite. None.

Ordnance. At least one captive AGM-88 HARM.

External Syllabus Support. None.

SSWD-586      1.3              2 FA-18C/D A (NS)

Goal. Track proficiency in shooting the AGM-88 HARM.

Requirement. Must shoot one AGM-88 HARM.

Prerequisite. None.

Ordnance. At least one AGM-88 HARM.

External Syllabus Support. Live Air-to-Surface missile range with a range safety officer, emitter on the range.

SSWD-587      1.3              2 FA-18C/D A (NS)

Goal. Track proficiency in shooting the SLAM(ER).

Requirement. Must shoot one SLAM(ER).

Prerequisite. None.

Ordnance. At least one SLAM(ER).

External Syllabus Support. Live Air-to-Surface missile range with a range safety officer.

SSWD-588      1.3              2 FA-18A/C/D A (NS)

Goal. Track proficiency in dropping a TALD.

Requirement. Must drop one TALD.

Prerequisite. None.

Ordnance. At least one TALD

External Syllabus Support. Inert or Live ordnance range.

7. External Syllabus Support Non-Availability Tracking (TRK)

a. Purpose. To track non-availability of external syllabus support requirements.

b. General. In the event that ordnance or dissimilar adversary support (as required in the external syllabus support specific sortie description) is not available, the following tracking (TRK) codes shall be logged in addition to the syllabus event code.

TRK-598                NA                FA-18A/C/D    A

Goal. To track the non-availability of ordnance (as required in the external syllabus support specific sortie description).

Requirement. Every attempt shall be made to comply with the specific sortie descriptions and ordnance requirements. Upon successful completion of the training event, log the specific sortie training code in addition to TRK-598.

Prerequisite. Required ordnance is not available.

TRK-599                NA                FA-18A/C/D    A

Goal. To track the non-availability of dissimilar adversaries (as required in the external syllabus support specific sortie description).

Requirement. Every attempt shall be made to comply with the specific sortie descriptions and dissimilar adversary requirements. Upon successful completion of the training event, log the specific sortie training code in addition to TRK-599.

Prerequisite. Required dissimilar adversary support is not available.

150. 600 LEVEL REQUIRED EVENTS (RQD)/QUALIFICATIONS (QUAL)/DESIGNATIONS (DESG) (FA-18A/C/D)

1. Required Events (RQD)

a. Purpose. To track training codes associated with required evaluations and flight leadership proficiency.

b. General

(1) ?E?-coded sorties are evaluation sorties. CRP is not awarded for these 600-level sorties; however, CRP credit may be obtained by logging the appropriate training code(s) in the 200-400 level syllabus.

(2) Flight Leadership proficiency tracking codes (RQD-505-507) shall be logged in conjunction with the appropriate 200-400 level event training code every time an aircrew flies an event as a designated section lead, division lead, or mission commander.

c. Academic Training. None.

d. Simulator Training. (2 Periods, 2.0 Hours)

e. Flight Training. (6 Flights, 7.8 Hours)

RQD-600E            1.3            E 1 FA-18A/C/D WTT/OFT A/S (N)

Goal. Demonstrate proficiency flying in an annual NATOPS check.

Requirement. Successfully conduct the check IAW applicable directives.

Performance Standards. IAW the FA-18 NATOPS.

Prerequisites. See current version of OPNAV 3710.

Ordinance. None.

External Syllabus Support. None.

RQD-601E            1.3            E 1 FA-18A/C/D WTT/OFT A/S (N)

Goal. Demonstrate proficiency flying in an annual instrument check.

Requirement. Successfully conduct the evaluation IAW applicable directives.

Performance Standards. IAW NATOPS and OPNAV 3710.

Prerequisites. None.

Ordinance. None.

External Syllabus Support. None.

SRQD-602E            1.0            E WTT/OFT S

Goal. Demonstrate proficiency in executing ground and

airborne emergency procedures.

Requirement. Successfully execute the procedures for 1 ground emergency and 2 airborne emergencies, at a minimum.

Performance Standards.

- (a) Executes the correct "boldface" NATOPS procedures.
- (b) Makes appropriate flight leadership decisions.

Prerequisites. None.

Ordinance. None.

External Syllabus Support. None.

RQD-603            1.3            R 1+ FA-18A/C/D A

Goal. Track proficiency in day or night strategic aerial refueling.

Requirement. Two Day contacts and Two night contacts required for completion.

Prerequisite. None.

Ordinance. None.

External Syllabus Support. One KC-135 or KC-10 tanker.

SRQD-604E            1.0            E WTT/OFT S

Goal. Introduce and demonstrate techniques and procedures associated with the functional check flight.

Requirement. Simulator shall be conducted under the supervision of a designated FCF pilot. All portions of the FCF checklist shall be reviewed during the simulator period.

Performance Standards. None.

Prerequisites. None.

Ordinance. None.

External Syllabus Support. None.

RQD-605            1.3            R 1+ FA-18A/C/D A

Goal. Track section lead proficiency.

Requirement. To maintain proficiency as a section lead a pilot shall brief, lead, and debrief the designated event in accordance with the mission performance standards for that event.

Prerequisite. Designated section leader.

Ordinance. None.

External Syllabus Support. None.

RQD-606            1.3            R 1+ FA-18A/C/D A

Goal. Track division lead proficiency.

Requirement. To maintain proficiency as a division lead a pilot shall brief, lead, and debrief the designated event in accordance with the mission performance standards for that event.

Prerequisite. Designated division leader.

Ordinance. None.

External Syllabus Support. None.

RQD-607            1.3            R 1+ FA-18A/C/D A

Goal. Track mission commander proficiency.

Requirement. To maintain proficiency as a mission commander aircrew shall brief, lead, and debrief the designated event in accordance with the mission performance standards for that event.

Prerequisite. Designated mission commander.

Ordinance. None.

External Syllabus Support. None.

## 2. Qualification Events (QUAL).

a. Purpose. To track training codes associated with qualifications.

b. General

(1) ?E?-coded sorties are evaluation sorties. ?E?-coded sorties in the 600-level phase may be logged in conjunction with any sortie that completes its stage. For example, RQD-610E may be flown in conjunction with LAT-208. CRP is not awarded for these 600-level sorties; however, CRP credit may be obtained by logging the appropriate training code(s) in the 200-400 level syllabus. Once the flight to attain the qualification is complete, a letter from the squadron commanding officer awarding the qualification shall be placed in the NATOPS jacket and APR.

c. Academic Training. Refer to the MAWTS-1 Course Catalog.

d. Simulator Training. None

e. Flight Training. (8 Flights, 10.4 Hours)

QUAL-610E            1.3            R 1+ FA-18A/C/D A

Goal. Tracking code for LAT qualification.

Requirement. Completion of LAT-208 meets the requirements for the PUI to be LAT qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as LAT qualified

shall be placed in the NATOPS jacket.

Prerequisites. LAT-204-208.

QUAL-613E      1.3                      R 1+ FA-18A/C/D A

Goal. Tracking code for Day carrier qualification (CQ).

Requirement. Completion of CQ-490 meets the requirements for the PUI to be day carrier qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as day carrier qualified shall be placed in the NATOPS jacket.

Prerequisites. FCLP-290, CQ-490.

QUAL-615E      1.3                      R 1+ FA-18A/C/D A N

Goal. Tracking code for Night carrier qualification (CQ).

Requirement. Completion of meets the requirements for the PUI to be night carrier qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as night y carrier qualified shall be placed in the NATOPS jacket.

Prerequisites. FCLP-291,

QUAL-616E      1.3                      2 FA-18A/C/D A

Goal. Tracking code for ACM qualification.

Requirement. Completion of ACM-245 meets the requirements for the PUI to be ACM qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as ACM qualified shall be placed in the NATOPS jacket.

Prerequisites. BFM-230-236 and ACM 240-245.

QUAL-619E      1.3                      2 FA-18D A

Goal. Tracking code for FACA(A) qualification.

Requirement. Completion of FAC(A)-387 meets the requirements for the PUI to be FAC(A) qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as FAC(A)qualified shall be placed in the NATOPS jacket.

Prerequisites. FAC(A)-380-387

QUAL-621E      1.3                      2 FA-18A/C/D A NS

Goal. Tracking code for NS(H) qualification.

Requirement. Completion of NS-214 meets the requirements for the PUI to be NS(H) qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as NS(H) qualified shall be placed in the NATOPS jacket.

Prerequisites. NS-209-214

QUAL-622E      1.3              2 FA-18A/C/D A NS

Goal. Tracking code for NS(L) qualification.

Requirement. Completion of NS-412 meets the requirements for the PUI to be NS(L) qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as NS(L) qualified shall be placed in the NATOPS jacket.

Prerequisites. NS(H) qualified, NS-410-412.

QUAL-623E      1.3              FA-18D A

Goal. Tracking code for TACA(A) qualification.

Requirement. Completion of TAC(A)-391 meets the requirements for the PUI to be TAC(A) qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as TAC(A) qualified shall be placed in the NATOPS jacket.

Prerequisites. FAC(A) qualified, TAC(A)-390, 391

3. Flight Leadership IUT and Designation Sorties (DESG).

a. Purpose. To prepare and evaluate the IUT's ability to plan, brief and lead an event as a section lead, division lead, or mission commander.

b. General

(1) IUT shall conduct the following day and night workup sorties in order to develop the IUT's flight leadership. Completion of the IUT syllabus meets the requirements for the IUT to be designated as section leader, division leader, or mission commander. At the discretion of the squadron commanding officer, a letter designating the pilot as section leader, division leader, or mission commander shall be placed in the NATOPS jacket and APR. Re-designation will require successful completion of the evaluation event only, at the discretion of the commanding officer.

(2) IUT shall be complete with all 200 and 300 level events prior to beginning the section lead IUT syllabus (DESG-640-649E).

(3) All section lead IUT events shall be evaluated by a designated division lead or higher.

(4) All division lead IUT events shall be evaluated by a designated mission commander.

(5) All mission commander IUT events shall be evaluated by a squadron WTI or commanding officer.

c. Academic Training. Refer to the MAWTS-1 Course Catalog for the appropriate flight leadership qualification academic syllabus.

d. Simulator Training. None.

e. Flight Training. (19 Flights, 24.7 Hours)

DESG-631E      1.3              2 FA-18A/C/D A

Goal. Demonstrate proficiency in the execution of FCF checklist.



Requirement. Shall be flown with a designated FCF pilot in a chase aircraft during day VMC conditions. Completion of the FCF checklist.

Mission Performance Standards. Completion of the applicable FCF checklist.

Prerequisites. RQD-S604.

Ordinance. None.

External Support. None.

DESG-640E

1.3                      2 FA-18A/C/D      A

Goal. Tracking code for section leader (IUT).

Requirement. Plan, brief, lead and debrief ACM-242 as a section lead. Upon successful completion of this event, the IUT shall log both training codes for tracking purposes. A designated division lead or higher shall evaluate this event.

Mission Performance Standards. IUT shall successfully complete all MPSs associated with ACM-242.

Prerequisites. 200 and 300 level events complete.

Ordinance. As required for ACM-242.

External Support. As required for ACM-242.

DESG-641E

1.3                      2 FA-18A/C/D      A

Goal. Tracking code for section leader (IUT).

Requirement. Plan, brief, lead and debrief BFM-233 as a section lead. Upon successful completion of this event, the IUT shall log both training codes for tracking purposes. A designated division lead or higher shall evaluate this event.

Mission Performance Standards. IUT shall successfully complete all MPSs associated with BFM-233.

Prerequisites. 200 and 300 level events complete.

Ordinance. As required for BFM-233.

External Support. As required for BFM-233.

DESG-642E

1.3                      2 FA-18A/C/D      A

Goal. Tracking code for section leader (IUT).

Requirement. Plan, brief, lead and debrief BFM-236 as a section lead. Upon successful completion of this event, the IUT shall log both training codes for tracking purposes. A designated division lead or higher shall evaluate this event.

Mission Performance Standards. IUT shall successfully

complete all MPSS associated with BFM-236.

Prerequisites. 200 and 300 level events complete.

Ordinance. As required for BFM-236.

External Support. As required for BFM-236.

DESG-643E

1.3            2 FA-18A/C/D    A

Goal. Tracking code for section leader (IUT).

Requirement. Plan, brief, lead and debrief ACM-334 as a section lead. Upon successful completion of this event, the IUT shall log both training codes for tracking purposes. A designated division lead or higher shall evaluate this event.

Mission Performance Standards. IUT shall successfully complete all MPSS associated with ACM-334.

Prerequisites. 200 and 300 level events complete.

Ordinance. As required for ACM-334.

External Support. As required for ACM-334.

DESG-644E

1.3            2 FA-18A/C/D    A

Goal. Tracking code for section leader (IUT).

Requirement. Plan, brief, lead and debrief BAS-226 as a section lead. Upon successful completion of this event, the IUT shall log both training codes for tracking purposes. A designated division lead or higher shall evaluate this event.

Mission Performance Standards. IUT shall successfully complete all MPSS associated with BAS-226.

Prerequisites. 200 and 300 level events complete.

Ordinance. As required for BAS-226.

External Support. As required for BAS-226.

DESG-645E

1.3            2 FA-18A/C/D    A

Goal. Tracking code for section leader (IUT).

Requirement. Plan, brief, lead and debrief BAS-322 as a section lead. Upon successful completion of this event, the IUT shall log both training codes for tracking purposes. A designated division lead or higher shall evaluate this event.

Mission Performance Standards. IUT shall successfully complete all MPSS associated with BAS-322.

Prerequisites. 200 and 300 level events complete.

Ordinance. As required for BAS-322.

External Support. As required for BAS-322.

DESG-646E

1.3                      2 FA-18A/C/D    A

Goal. Tracking code for section leader (IUT).

Requirement. Plan, brief, lead and debrief CAS-251 as a section lead. Upon successful completion of this event, the IUT shall log both training codes for tracking purposes. A designated division lead or higher shall evaluate this event.

Mission Performance Standards. IUT shall successfully complete all MPSS associated with CAS-251.

Prerequisites. 200 and 300 level events complete.

Ordinance. As required for CAS-251.

External Support. As required for CAS-251.

DESG-647E

1.3                      2 FA-18A/C/D    A

Goal. Tracking code for section leader (IUT).

Requirement. Plan, brief, lead and debrief CAS-252 as a section lead. Upon successful completion of this event, the IUT shall log both training codes for tracking purposes. A designated division lead or higher shall evaluate this event.

Mission Performance Standards. IUT shall successfully complete all MPSS associated with CAS-252.

Prerequisites. 200 and 300 level events complete.

Ordinance. As required for CAS-252.

External Support. As required for CAS-252.

DESG-648E

1.3                      2 FA-18A/C/D    A

Goal. Tracking code for section leader (IUT).

Requirement. Plan, brief, lead and debrief AR-261 as a section lead. Upon successful completion of this event, the IUT shall log both training codes for tracking purposes. A designated division lead or higher shall evaluate this event.

Mission Performance Standards. IUT shall successfully complete all MPSS associated with AR-261.

Prerequisites. 200 and 300 level events complete.

Ordinance. As required for AR-261.

External Support. As required for AR-261.

DESG-649E

1.3                      2 FA-18A/C/D    A

Goal. Tracking code for section leader (DESG).

Requirement. Plan, brief, lead and debrief AI-370 as a section lead. Upon successful completion of this event, the IUT shall log both training codes for tracking purposes. A designated division lead or higher shall evaluate this event.

Mission Performance Standards. IUT shall successfully complete all MPSs associated with AI-370.

Prerequisites. DESG-640E-648E.

Ordinance. As required for AI-370.

External Support. As required for AI-370.

DESG-650E

1.3                      4 FA-18A/C/D    A

Goal. Tracking code for division leader (IUT).

Requirement. Plan, brief, lead and debrief ACM-435 as a division lead. Upon successful completion of this event, the IUT shall log both training codes for tracking purposes. A designated mission commander shall evaluate this event.

Mission Performance Standards. IUT shall successfully complete all MPSs associated with ACM-435.

Prerequisites. None.

Ordinance. As required for ACM-435.

External Support. As required for ACM-435.

DESG-651E

1.3                      4 FA-18A/C/D    A

Goal. Tracking code for division leader (IUT).

Requirement. Plan, brief, lead and debrief ACM-338 as a division lead. Upon successful completion of this event, the IUT shall log both training codes for tracking purposes. A designated mission commander shall evaluate this event.

Mission Performance Standards. IUT shall successfully complete all MPSs associated with ACM-338.

Prerequisites. None.

Ordinance. As required for ACM-338.

External Support. As required for ACM-338.

DESG-652E

1.3                      4 FA-18A/C/D    A

Goal. Tracking code for division leader (IUT).

Requirement. Plan, brief, lead and debrief AR-461 as a division lead. Upon successful completion of this event, the IUT shall log both training codes for tracking purposes. A designated mission commander shall evaluate this event.

Mission Performance Standards. IUT shall successfully

complete all MPSS associated with AR-461.

Prerequisites. None.

Ordinance. As required for AR-461.

External Support. As required for AR-461.

DESG-653E

1.3            4 FA-18A/C/D    A

Goal. Tracking code for division leader (IUT).

Requirement. Plan, brief, lead and debrief AI-372 as a division lead. Upon successful completion of this event, the IUT shall log both training codes for tracking purposes. A designated mission commander shall evaluate this event.

Mission Performance Standards. IUT shall successfully complete all MPSS associated with AI-372.

Prerequisites. None.

Ordinance. As required for AI-372.

External Support. As required for AI-372.

DESG-659E

1.3            4 FA-18A/C/D    A

Goal. Tracking code for division leader (DESG).

Requirement. Plan, brief, lead and debrief AI-470 as a division lead. Upon successful completion of this event, the IUT shall log both training codes for tracking purposes. A designated mission commander shall evaluate this event.

Mission Performance Standards. IUT shall successfully complete all MPSS associated with AI-470.

Prerequisites. DESG-650E-653E.

Ordinance. As required for AI-470.

External Support. As required for AI-470.

DESG-670E

1.3            4+ FA-18A/C/D    A

Goal. Tracking code for mission commander (IUT).

Requirement. Plan, brief, lead and debrief AI-471 as a mission commander. Upon successful completion of this event, the IUT shall log both training codes for tracking purposes. A designated WTI or commanding officer shall evaluate this event.

Mission Performance Standards. IUT shall successfully complete all MPSS associated with AI-471.

Prerequisites. None.

Ordinance. As required for AI-471.

External Support. As required for AI-471.

DESG-671E      1.3              4+ FA-18A/C/D      A

Goal. Tracking code for mission commander (IUT).

Requirement. Plan, brief, lead and debrief AI-472 as a mission commander. Upon successful completion of this event, the IUT shall log both training codes for tracking purposes. A designated WTI or commanding officer shall evaluate this event.

Mission Performance Standards. IUT shall successfully complete all MPSS associated with AI-472.

Prerequisites. None.

Ordinance. As required for AI-472.

External Support. As required for AI-472.

DESG-679E      1.3              4+ FA-18A/C/D      A

Goal. Tracking code for mission commander (DESG).

Requirement. Plan, brief, lead and debrief AI-472 as a mission commander. Upon successful completion of this event, the IUT shall log both training codes for tracking purposes. A designated WTI or commanding officer shall evaluate this event.

Mission Performance Standards. IUT shall successfully complete all MPSS associated with AI-472.

Prerequisites. DESG-670, 671.

Ordinance. As required for AI-472.

External Support. As required for AI-472.

#### 4. Instructor Designation Tracking Codes (IDESG)

a. Purpose. To track training codes associated with Instructor Designations (IDESG).

b. General

(1) Upon successful completion of the following MAWTS-1 instructor programs, WTI or NSAWC TOPGUN course, aircrew shall log the appropriate tracking codes.

IDESG-681E      NA              FA-18A/C/D      A

Goal. Tracking code for Low Altitude Tactics Instructor designation LAT(I).

Requirement. Successfully complete the MAWTS-1 LAT(I) program.

Mission Performance Standards. Refer to MAWTS-1 Course

Catalog.

Prerequisites. Refer to MAWTS-1 Course Catalog.

Ordinance. Refer to MAWTS-1 Course Catalog.

External Support. Refer to MAWTS-1 Course Catalog.

IDESG-683E

NA                      FA-18D      A

Goal. Tracking code for Forward Air Controller (Airborne) Instructor FAC(A)I.

Requirement. Successfully complete the MAWTS-1 FAC(A)I program.

Mission Performance Standards. Refer to MAWTS-1 Course Catalog.

Prerequisites. Refer to MAWTS-1 Course Catalog.

Ordinance. Refer to MAWTS-1 Course Catalog.

External Support. Refer to MAWTS-1 Course Catalog.

IDESG-688E

NA                      FA-18A/C/D      A

Goal. Tracking code for Air Combat Tactics Instructor ACT(I).

Requirement. Successfully complete the MAWTS-1 ACT(I) program.

Mission Performance Standards. Refer to MAWTS-1 Course Catalog.

Prerequisites. Refer to MAWTS-1 Course Catalog.

Ordinance. Refer to MAWTS-1 Course Catalog.

External Support. Refer to MAWTS-1 Course Catalog.

IDESG-689E

NA                      FA-18D      A

Goal. Tracking code for Tactical Air Coordinator (Airborne) Instructor TAC(A)I.

Requirement. Successfully complete the MAWTS-1 TAC(A)I program.

Mission Performance Standards. Refer to MAWTS-1 Course Catalog.

Prerequisites. Refer to MAWTS-1 Course Catalog.

Ordinance. Refer to MAWTS-1 Course Catalog.

External Support. Refer to MAWTS-1 Course Catalog.

IDESG-696

NA                      FA-18A/C/D      A

Goal. Tracking code for NSAWC TOPGUN course completion.

Requirement. Successfully complete the NSAWC TOPGUN course.

Mission Performance Standards. None.

Prerequisites. None.

Ordinance. None.

External Support. None.

IDESG-697

NA FA-18A/C/D A

Goal. Tracking code for MAWTS-1, Marine Division Tactics Course (MDTC) completion.

Requirement. Successfully complete the MAWTS-1 Marine Division Tactics Course (MDTC).

Mission Performance Standards. Refer to MAWTS-1 Course Catalog.

Prerequisites. Refer to MAWTS-1 Course Catalog.

Ordinance. Refer to MAWTS-1 Course Catalog.

External Support. Refer to MAWTS-1 Course Catalog.

IDESG-698E

NA FA-18A/C/D A

Goal. Tracking code for Night Systems Instructor (NSI).

Requirement. Successfully complete the MAWTS-1 (NSI) program.

Mission Performance Standards. Refer to MAWTS-1 Course Catalog.

Prerequisites. Refer to MAWTS-1 Course Catalog.

Ordinance. Refer to MAWTS-1 Course Catalog.

External Support. Refer to MAWTS-1 Course Catalog.

IDESG-699

NA FA-18A/C/D A

Goal. Tracking code for MAWTS-1, Weapons and Tactics Instructor (WTI) course completion.

Requirement. Successfully complete the MAWTS-1 Weapons and Tactics Instructor (WTI) course.

Mission Performance Standards. Refer to MAWTS-1 Course Catalog.

Prerequisites. Refer to MAWTS-1 Course Catalog.

Ordinance. Refer to MAWTS-1 Course Catalog.

External Support. Refer to MAWTS-1 Course Catalog.



160. EXPENDABLE ORDNANCE REQUIREMENTS

1. General. Ordnance requirements are developed on a per aircrew basis as outlined in OPNAVNOTE 8010.

a. Support sortie ordnance requirements are not included in this table.

b. The required ordnance in this table is based on a single aircrew attaining initial competency in every event in the 200, 300, 400, and 500 Levels. It does not reflect the maintaining of proficiency in accordance with the refly interval.

c. Once initial competency has been attained, in an event, with the required ordnance (per the sortie description), inert ordnance may be substituted for live ordnance.

d. FA-18A/C/D

<u>ORDNANCE</u>	<u>200</u>	<u>300</u>	<u>400</u>	<u>500</u>	<u>TOTAL</u>
BDU-48	6				6
MK-76	84	18	12		114
BDU-45	4	8			12
MK-83 (INERT)		4			4
LGTR	6	2	6		14
MK-82	16	4	4	1	25
MK-83	8	4		1	13
MK-84				1	1
GBU-10/12/16		3		1	4
CBU-99/100	4		4	1	5
2.75" ROCKET		49	14	7	70
MK-77				1	1
JDAM				1	1
JSOW				1	1
AGM-88				1	1
SLAM(ER)				1	1
20 MM	1750	1000	500	1250	4500
LUU-2/19		32	4	4	40
AGM-65E				1	1
AGM-65F				1	1
AIM-9				1	1
AIM-7				1	1
AIM-120				1	1
CHAFF	540	410	240		1190
FLARES	425	390	150		965
TALD				1	1

161. CAPTIVE ORDNANCE REQUIREMENTS

1. General. The required captive ordnance in this table is based on a single aircrew attaining initial competency in every event in the 200, 300, 400, and 500 Levels. It does not reflect the maintaining of proficiency in accordance with the refly interval.

a. FA-18A/C/D.

<u>CAPTIVE ORDNANCE</u>	<u>200</u>	<u>300</u>	<u>400</u>	<u>500</u>	<u>TOTAL</u>
HARM		1	2	1	4
AGM-65E	2	2	2	1	7
AGM-65F	2	2	2	1	7
JDAM				1	1
JSOW				1	1
AIM-7/120	6	8	7		21
AIM-9	13	10	7		30

162. GROUND ORDNANCE REQUIREMENTS

1. General. The required ground ordnance in this table is based on a single aircrew attaining initial competency in every event in the 200, 300, and 400 Levels. It does not reflect the maintaining of proficiency in accordance with the refly interval.

<u>ORDNANCE</u>	<u>200</u>	<u>300</u>	<u>400</u>	<u>TOTAL</u>
HE Artillery	8	60	12	80
WP Artillery	4	32	12	48
Ill. Artillery	0	32	4	36

170. REFLY INTERVAL, CRP, AND CHAINING TABLES

1. Purpose. To provide a quick reference guide for refly interval, CRP, chaining, evaluated events, refresher events, and night or night systems requirements.

FA-18A/C/D 200 LEVEL TRAINING															
STAGE	TRAINING CODE	SORTIE DESCRIPTION	FLIGHT HRS	SIMULATOR HRS	REFLY FA-18A/C	CRP FA-18A/C	REFLY FA-18D	CRP FA-18D	REFRESHER	CHAINING	EVAL	NIGHT	NIGHT SYSTEMS	AC / SIM	MIN # OF AC
AAR	200	DAY AAR	1.3		180	0.3	180	0.3						A	1
AAR	201	NIGHT AAR	1.3		365	0.3	365	0.3		200		N		A	1
Sub Total			2.6			0.6		0.6							
STRXN	202	HI/MED ALT TRXN SIM		1.0	365	0.0	365	0.0						S	
TRXN	203	HI/MED ALT TRXN	1.3		365	0.4	365	0.4		202			(NS)	A	2
Sub Total			1.3	1.0		0.4		0.4							
SLAT	204	2D/3D LAT SIM		1.0	*	0.0	*	0.0	X					S	
LAT	205	2D BASIC LAT WU	1.3		*	0.2	*	0.2	X					A	2
LAT	206	3D ADVANCED LAT	1.3		*	0.2	*	0.2						A	2
LAT	207	SEC LAT TRXN	1.3		*	0.2	*	0.2						A	2
LAT	208E	LAT REVIEW (LATQ)	1.3		180	0.4	180	0.4	X		X			A	2
Sub Total			5.2	1.0		1.0		1.0							
SNS	209	FAM / FORM SIM		1.0	*	0.0	*	0.0					NS	S	
NS	210	FAM / FORM	1.3		*	0.2	*	0.2					NS	A	2
NS	211	2V2 INTERCEPTS	1.3		*	0.2	*	0.2	X				NS	A	2
NS	212	HI/MED ANGLE DIVE	1.3		*	0.2	*	0.2					NS	A	2
NS	213	SEC HI/MED DIVE	1.3		*	0.2	*	0.2	X				NS	A	2
NS	214E	SEC LOW LEVEL (NSQ(H)	1.3		*	0.2	*	0.2			X		NS	A	2
Sub Total			6.5	1.0		1.0		1.0							
SBAS	220	FLIR / LDT SIM		1.0	365	0.2	365	0.2	X					S	
BAS	221	SEC LOW LEVEL NAV	1.3		365	0.2	365	0.2						A	2
BAS	222	LO/MED/HI ANGLE DIVE	1.3		180	0.4	180	0.4	X					A	2
BAS	223	LO/HI ANGLE POP DEL	1.3		180	0.4	180	0.4						A	2
BAS	224	FLIR DELIVERIES	1.3		180	0.4	180	0.4		220				A	2
BAS	225	LDT DELIVERIES	1.3		180	0.4	180	0.4		220				A	2
BAS	226	SEC MED/HI ANGLE DIVE	1.3		180	0.5	180	0.5		222			NS	A	2
BAS	227	HI ALT FLIR DELIVERIES	1.3		180	0.5	180	0.5	X	224,220			NS	A	2
BAS	228E	SEC LO/HI ANGLE POP	1.3		180	0.5	180	0.5		223	X				
Sub Total			10.4	1.0		3.5		3.5							
BFM	230	1V1 ROLLER / FLAT	1.3		90	0.3	180	0.2	X					A	2
BFM	231	1V1 OBFM	1.3		90	0.4	180	0.4						A	2
BFM	232	1V1 DBFM	1.3		90	0.4	180	0.4						A	2
BFM	233	1V1 NEUTRAL / FQMD	1.3		90	0.4	180	0.4	X					A	2
BFM	234	1V1 DISSIMILAR	1.3		180	0.5	*	0.2		233				A	1
BFM	235	2V1 VIS SETS	1.3		360	0.4	*	0.2						A	2
BFM	236	2V2 VIS SETS (DISSIM)	1.3		180	0.5	180	0.5	X	235				A	2
Sub Total			9.1	0.0		2.9		2.3							
SACM	240	RADAR MECH SIM		1.0	*	0.0	*	0.0						S	
SACM	241	SRR SIM		1.0	365	0.0	365	0.0	X					S	
ACM	242	1V1 INTERCEPTS	1.3		*	0.2	*	0.2						A	2
ACM	243	2V2 VID (MAN/NON-MAN)	1.3		180	0.5	180	0.5	X					A	2
ACM	244	2V2 PHID (DISSIMILAR)	1.3		180	0.5	180	0.5	X					A	2
ACM	245E	4VX OCA (ACM QUAL)	1.3		*	0.2	*	0.2			X			A	4
Sub Total			5.2	2.0		1.4		1.4							

FA-18A/C/D 200 LEVEL TRAINING (con't)															
STAGE	TRAINING CODE	SORTIE DESCRIPTION	FLIGHT HRS	SIMULATOR HRS	REFLY FA-18A/C	CRP FA-18A/C	REFLY FA-18D	CRP FA-18D	REFRESHER	CHAINING	EVAL	NIGHT	NIGHT SYSTEMS	AC / SIM	MIN # OF AC
CAS	250	DAY LOW THREAT	1.3		180	0.4	180	0.4						A	2
CAS	251	DAY HIGH THREAT	1.3		90	0.4	90	0.4	X					A	2
CAS	252	NIGHT LOW THREAT	1.3		180	0.5	180	0.5					NS	A	2
Sub Total			3.9	0.0		1.3		1.3							
SAR	260	AGM-65E/F SIM		1.0	545	0.0	545	0.0						S	
AR	261	DAY SEC MED/HI ALT	1.3		180	0.4	180	0.3	X					A	2
AR	262	NIGHT SEC MED/HI ALT	1.3		180	0.6	180	0.4					NS	A	2
Sub Total			2.6	1.0		1.0		0.7							
AI	270	SEC AI (AGGRESSED)	1.3		180	0.5	180	0.5						A	2
AI	271	SEC AI (UNAGGRESSED)	1.3		180	0.5	180	0.5					NS	A	2
AI	272	DIV AI (UNAGGRESSED)	1.3		180	0.5	180	0.5	X					A	4
Sub Total			3.9	0.0		1.5		1.5							
TAR	280	EO / IR AR	1.3				180	0.3	X	261				A	2
TAR	281	NIGHT SAR / IR AR	1.3				180	0.3	X	262			NS	A	2
TAR	282	DATALINK POST AI	1.3				180	0.3						A	2
Sub Total			3.9	0.0		0.0		0.9							
SFCLP	290	FCLP PROCEDURE SIM		1.0	*	0.0	*	0.0						S	
FCLP	291	DAY FCLP	1.3		365	0.2	365	0.2						A	1
FCLP	292	NIGHT FCLP	1.3		365	0.2	365	0.2				N	(NS)	A	1
Sub Total			2.6	1.0		0.4		0.4							
			FLIGHT HOURS	SIM HOURS		CRP		CRP							
Sub Total 200			57.2	8.0		15.0		15.0							
Total CRP 100			*	*		60.0		60.0							
Total			57.2	8.0		75.0		75.0							

FA-18A/C/D 300 LEVEL TRAINING															
STAGE	TRAINING CODE	SORTIE DESCRIPTION	FLIGHT HRS	SIM HRS	REFLY FA-18A/C	CRP FA-18A/C	REFLY FA-18D	CRP FA-18D	REFRESHER	CHAINING	EVAL	NIGHT	NIGHT SYSTEMS	AC / SIM	MIN # OF AC
SBAS	320	JDAM / JSOW SIM		1.0	365	0.7	365	0.6	X					S	
SBAS	321	HARM SIM		1.0	365	0.7	365	0.6	X					S	
BAS	322	BUDDY LASE/BOMB	1.3		180	0.8	180	0.7	X	220, 224			(NS)	A	2
BAS	323	LOW ANGLE/LOW DRAG	1.3		365	0.8	365	0.6					(NS)	A	2
BAS	324	RADAR DELIVERIES	1.3		365	0.8	365	0.5					(NS)	A	2
BAS	325	FAC(A) ESCORT	1.3		365	0.8	365	0.5					(NS)	A	1
Sub Total			5.2	2.0		4.6		3.5							
SACM	330	BVR RADAR MECH SIM		1.0	180	0.5	365	0.5		240				S	
SACM	331	EA ENVIRONMENT SIM		1.0	180	0.8	180	0.6	X					S	
ACM	332	2VX OCA (SWEEP) BVR	1.3		180	0.8				244				A	2
ACM	333	2VX OCA (ESCORT) VID	1.3		180	0.8	180	0.6	X	243				A	2
ACM	334	4/2VX DCA (POINT D) BVR	1.3		180	0.8	365	0.6	X	244				A	2
ACM	335	4/2VX OCA (SCREEN) VID	1.3		180	0.8				243				A	2
ACM	336	4/2VX DCA (HVAAP) BVR	1.3		180	0.8				244				A	2
ACM	337	4/2VX EA ENVIRONMENT	1.3		365	0.8				331				A	2
ACM	338	4VX OCA (SES) VID/BVR	1.3		180	0.8	365	0.8		334, 244				A	4
Sub Total			9.1	2.0		6.9		3.1							
SCAS	350	TYPE 2 CAS SIM		1.0	180	0.5	180	0.5						S	
CAS	351	LOW THREAT W/FAC(A)	1.3		180	0.8	180	0.8					NS	A	2
CAS	352	HIGH THREAT	1.3		180	0.8	180	0.8	X				NS	A	2
CAS	353	CAS IN URBAN ENVIRON.	1.3		365	0.8	365	0.8					(NS)	A	2
Sub Total			3.9	1.0		2.9		2.9							
AR	360	SEC MED/HI ALT (PGM)	1.3		180	0.8	180	0.8	X	261			(NS)	A	2
AR	361	SEC MED/HI ALT (PGM)	1.3		180	0.8	180	0.8		262			NS	A	2
AR	362	SCAR	1.3		180	0.8	180	0.5		261			(NS)	A	1
AR	363	ASSUALT SPT ESCORT	1.3		365	0.8	365	0.7					(NS)	A	2
Sub Total			5.2	0.0		3.2		2.8							
AI	370	SEC AI (AGGRESSED)	1.3		180	0.8	180	0.8		270			NS	A	2
AI	371	DIV AI (UNAGGRESSED)	1.3		180	0.8	180	0.8		271			NS	A	4
AI	372	DIV AI (AGGRESSED)	1.3		180	0.8	180	0.8	X	270,272			(NS)	A	4
Sub Total			3.9	0.0		2.4		2.4							
FAC(A)	380	LOW THREAT	1.3				180	0.5		362,261				A	1
FAC(A)	381	MED/HI THREAT	1.3				180	0.6	X					A	1
FAC(A)	382	LOW THREAT CFF	1.3				365	0.5	X				(NS)	A	1
FAC(A)	383	MED/HI THREAT CFF	1.3				365	0.6		382			(NS)	A	1
FAC(A)	384	RW FAC(A)	1.3				365	0.6					(NS)	A	1
FAC(A)	385	NIGHT LOW THREAT	1.3				180	0.6	X				NS	A	1
FAC(A)	386	NIGHT MED/HI THREAT	1.3				180	0.6					NS	A	1
FAC(A)	387E	TGT AREA INT (FACAO)	1.3				365	0.6			X		(NS)	A	1
Sub Total			10.4	0.0		0.0		4.6							
TAC(A)	390	TAC(A) INTRO	1.3				545	0.3	X				(NS)	A	1
TAC(A)	391E	MULTI- AGENCY (TACAO)	1.3				545	0.4		390	X		(NS)	A	1
Sub Total			2.6	0.0		0.0		0.7							
			FLIGHT HOURS	SIM HOURS		CRP		CRP							
Sub Total 300			40.3	5.0		20.0		20.0							
Total 200			57.2	8.0		75.0		75.0							
Total 200 & 300			97.5	13.0		95.0		95.0							

FA-18A/C/D 400 LEVEL TRAINING															
STAGE	TRAINING CODE	SORTIE DESCRIPTION	FLIGHT HRS	SIMULATOR HRS	REFLY FA-18A/C	CRP FA-18A/C	REFLY FA-18D	CRP FA-18D	REFRESHER	CHAINING	EVAL	NIGHT	NIGHT SYSTEMS	AC / SIM	MIN # OF AC
NS	410	SEC LOW LEVEL/TGT ATTK	1.3		*	0.2	*	0.2					NS	A	2
NS	411	SINGLE SHIP LAT CHASED	1.3		*	0.2	*	0.2					NS	A	2
NS	412E	SEC LAT TGT ATTK (NSQ(L)	1.3		365	0.5	365	0.5			X		NS	A	2
Sub Total			3.9	0.0		0.9		0.9							
ACM	430	AA GUN PATTERN	1.3		730	0.5	730	0.5						A	2
ACM	431	4/2VX PEACETIME ESC	1.3		545	0.3	545	0.3					(NS)	A	2
ACM	432	4/2VX HELO/PROP ATTK	1.3		545	0.3	545	0.3					(NS)	A	2
ACM	433	4VX OCA (SCREEN) VID	1.3		365	0.3	365	0.3		335,243			(NS)	A	4
ACM	434	4VX OCA (SWEEP) BVR	1.3		365	0.3	365	0.3		332,244			(NS)	A	4
ACM	435	4VX DCA (AREA DEF) BVR	1.3		365	0.3	365	0.3		334,244			NS	A	4
Sub Total			7.8	0.0		2.0		2.0							
AR	460	DIV MED/HI ALT W/ SCAR	1.3		365	0.3	365	0.3		360,261			(NS)	A	4
AR	461	DIV MED/HI ALT	1.3		365	0.3	365	0.3		361,262			NS	A	4
Sub Total			2.6	0.0		0.6		0.6							
AI	470	DIV AI (AGGRESSED)	1.3		365	0.5	365	0.5		370,270			NS	A	4
AI	471	MULTI-PLANE AI (AGRSD)	1.3		365	0.5	365	0.5		270				A	6
AI	472	MULTI-PLANE AI (AGRSD)	1.3		545	0.5	545	0.5		470,371,272			NS	A	6
Sub Total			3.9	0.0		1.5		1.5							
FAC(A)	480	DAY LOW THREAT	1.3		545	0.0								A	1
FAC(A)	481	NIGHT LOW THREAT	1.3		545	0.0							NS	A	1
Sub Total			2.6	0.0		0.0		0.0							
			FLIGHT HOURS	SIM HOURS		CRP		CRP							
Sub Total 400			20.8	0.0		5.0		5.0							
Total 200, & 300			97.5	13.0		95.0		95.0							
Total 200, 300, & 400			118.3	13.0		100.0		100.0							

FA-18A/C/D 500 LEVEL: INSTRUCTOR/SWD/TRK												
STAGE	TRAINING CODE	SORTIE DESCRIPTION	FLIGHT HRS	SIM HRS	REFLY FA-18 A/C/D	REFRESHER	CHANNING	EVAL	NIGHT	NIGHT SYSTEMS	AC / SIM	MIN # OF AC
SLATI	S510E	LAT REVIEW		1.0	*			X			S	
LATI	511E	BASIC LAT	1.3		*			X			A	2
LATI	512E	ADVAN LAT CHASE	1.3		*			X			A	2
LATI	513E	LAT CHASE (CERT)	1.3		*		208E, 681	X			A	2
ACTI	520E	1V1 BFM	1.3		*		230	X			A	2
ACTI	521E	2V2 SEM	1.3		*		236	X			A	2
ACTI	522E	2V2 PHID (CERT)	1.3		*		244, 688	X			A	2
NSI	530E	FAM / FORM	1.3		*			X		NS	A	2
NSI	531E	AI	1.3		*		271	X		NS	A	2
NSI	532E	LAT SEC ATTK (CERT)	1.3		*		412E, 698	X		NS	A	2
FAC(A)I	540E	DAY LOW THREAT	1.3		*		250	X			A	2
FAC(A)I	541E	NIGHT LOW THREAT	1.3		*		252	X		NS	A	2
FAC(A)I	542E	DAY MED/HI THREAT(CERT)	1.3		*		251, 683	X			A	2
TAC(A)I	550E	MULTI-AGENCY (CERT)	1.3		*		391E, 689				A	2
ASWD	560	CIRCULAR GUN PATT	1.3		730		430				A	
ASWD	561	FWQD GUN PATTERN	1.3		730		430				A	
ASWD	562	EMPLOY AIM-9			1095						A	
ASWD	563	EMPLOY AIM-7			1095						A	
ASWD	564	EMPLOY AIM-120			1095						A	
SSWD	570	EMPLOY MK 82/83/84			180						A	
SSWD	571	EMPLOY M61A1 (AS)			180						A	
SSWD	572	EMPLOY CBU'S			365						A	
SSWD	573	EMPLOY NAPALM			545						A	
SSWD	574	EMPLOY ROCKETS			365						A	
SSWD	575	EMPLOY BATTLEFIELD ILLUM			365				N		A	
SSWD	576	CAPTIVE AGM-65F			180		260				A	
SSWD	577	CAPTIVE AGM-65E			180		260				A	
SSWD	578	EMPLOY AGM-65F			1095		576, 260				A	
SSWD	579	EMPLOY AGM-65E			1095		577, 260				A	
SSWD	580	EMPLOY GBU-10/12/16/24			545						A	
SSWD	581	CAPTIVE JDAM			545		320				A	
SSWD	582	EMPLOY JDAM			1095		581, 320				A	
SSWD	583	CAPTIVE JSOW			545		320				A	
SSWD	584	EMPLOY JSOW			1095		583, 320				A	
SSWD	585	CAPTIVE HARM			180		321				A	
SSWD	586	EMPLOY HARM			1095		585, 321				A	
SSWD	587	EMPLOY SLAM(ER)			1095						A	
SSWD	588	EMPLOY TALD			1095						A	
TRK	598	REQUIRED ORD NOT AVAIL										
TRK	599	DISSIM ADVERSARY NOT AVAIL										
Total 500			18.5	1.0								

FA-18A/C/D 600 LEVEL: RQD/QUAL/DESG/IDESG												
STAGE	TRAINING CODE	SORTIE DESCRIPTION	FLIGHT HRS	SIMULATOR HRS	REFLY FA-18 A/C/D	REFRESHER	CHAINING	EVAL	NIGHT	NIGHT SYSTEMS	AC / SIM	MIN # OF AC
RQD	600E	NATOPS CHECK	1.3		365			X			A/S	
RQD	601E	INSTRUMENT CHECK	1.3		365			X			A/S	
SRQD	602E	EP SIMULATOR		1.0	180			X			S	
RQD	603	(D/N) STRATEGIC TANKER	1.3		545		200				A	
SRQD	604E	PMCF SIM		1.0				X			S	
RQD	605	SEC LEAD PROFICIENCY FLT	1.3		90						A	
RQD	606	DIV LEAD PROFICIENCY FLT	1.3		180						A	
RQD	607	MSN CMDR PROFICIENCY FLT	1.3		365						A	
QUAL	610E	LAT QUAL	1.3				208E	X			A	
QUAL	613E	DAY CQ	1.3				290	X			A	
QUAL	615E	NIGHT CQ	1.3				291	X	N		A	
QUAL	616E	ACM QUAL	1.3				245E	X			A	
QUAL	619E	FAC(A) QUAL	1.3				387E	X			A	
QUAL	621E	NSQ (HIGH)	1.3				214E	X		NS	A	
QUAL	622E	NSQ (LOW)	1.3				412E	X		NS	A	
QUAL	623E	TAC(A) QUAL	1.3				391E	X			A	
QUAL	624	LSO QUAL										
DESG	631E	PMCF DESG	1.3					X			A	
DESG	640E	SEC LD WU: ACM-242	1.3				242	X			A	
DESG	641E	SEC LD WU: BFM-233	1.3				233	X			A	
DESG	642E	SEC LD WU: BFM-236	1.3				236	X			A	
DESG	643E	SEC LD WU: ACM-334	1.3				334	X			A	
DESG	644E	SEC LD WU: BAS-226	1.3				226	X		NS	A	
DESG	645E	SEC LD WU: BAS-322	1.3				322	X			A	
DESG	646E	SEC LD WU: CAS-251	1.3				251	X			A	
DESG	647E	SEC LD WU: CAS-252	1.3				252	X		NS	A	
DESG	648E	SEC LD WU: AR-261	1.3				261	X			A	
DESG	649E	SEC LD DESG: AI-370	1.3				370	X		NS	A	
DESG	650E	DIV LD WU: ACM-435	1.3				435	X			A	
DESG	651E	DIV LD WU: ACM-338	1.3				338	X			A	
DESG	652E	DIV LD WU: AR-461	1.3				461	X		NS	A	
DESG	653E	DIV LD WU: AI-372	1.3				372	X			A	
DESG	659E	DIV LD DESG: AI-470	1.3				470	X		NS	A	
DESG	670E	MSN CMDR WU: AI-471	1.3				471	X			A	
DESG	671E	MSN CMDR WU: AI-472	1.3				472	X		NS	A	
DESG	679E	MSN CMDR DESG: AI-472	1.3				472	X		NS	A	
IDESG	681E	LAT(I)						X			A	
IDESG	683E	FAC(A)I						X			A	
IDESG	688E	ACT(I)						X			A	
IDESG	689E	TAC(A)I						X			A	
IDESG	696	TOPGUN										
IDESG	697	MDTC										
IDESG	698E	NSI						X		NS	A	
IDESG	699	WTI										
			FLIGHT HOURS	SIM HOURS								
Total 600			42.9	2.0								



171. T&R EVENT CONVERSION TABLE

1. Purpose. Provide a reference to facilitate the conversion of the former T&R codes to the new format.

OLD STAGE	OLD TRNG CODE	NEW STAGE	NEW TRNG CODE
<b>200 LEVEL</b>			
NAV	200		
	201	BAS	222
AR	202	AAR	200
	203		201
SFCLP	204	SFCLP	290
FCLP	204	FCLP	291
	205		292
SEW	206	STRXN	202
EW	206	TRXN	203
SLAT	208	SLAT	204
LAT	208	LAT	205
	209		206
SAA	210	SACM	240
AA	210	ACM	242
	211		242
	212	BFM	230
	213		231
	214		232
	215		233
	216		233
	217		234
	218		235
	219		
	220		236
	221	ACM	243
	222		243
	223		245E
AS	230	BAS	222
	231		224
	232		223
	233		226
	234		227
	235		228E
CAS	240	CAS	250
	241		251
DAS	250	AR	261
	251	AI	272

OLD STAGE	OLD TRNG CODE	NEW STAGE	NEW TRNG CODE
<b>300 LEVEL</b>			
LAT	308	LAT	207
	309		208E
SAA	310	SACM	330
AA	311	ACM	333
	312		332
	313		335
	314		334
	315		336
	316		433
	317		434
	318		435
	319		338
	320		337
	321		338
SAS	330	SBAS	330
AS	330	BAS	322
	331		323
	332		322
	333		324
CAS	340	CAS	351
	341		352
DAS	350		
	351	AI	371
	352		372
SASWD	360		
ASWD	360	ACM	430
	361		430
	362	ASWD	562-564
SSSWD	370	SBAS	321
	371		
	374	SAR	260
	375		260
SSWD	370	SSWD	585
	371		
	372		588
	373		575
	374		576
	375		577
	376		
SNS	380	SNS	209
	381		
NS	380		210
	381		211
	382		212
	383		213
	384		214E
	385		410
	386		411
	387		412

OLD STAGE	OLD TRNG CODE	NEW STAGE	NEW TRNG CODE
<b>300 LEVEL (con't)</b>			
SCACC	390		
	391		
	392		
CACC	390	FAQ(A)	380
	391		381
	392		382
	393		383
	394		384
	395		385
	396		386
	397		387E
	398	TAC(A)	390
	399		391E

OLD STAGE	OLD TRNG CODE	NEW STAGE	NEW TRNG CODE
<b>400 LEVEL</b>			
CQ	400		
	401		
AA	410	ACM	431
	411		432
DAS	450	AR	362
	451		362
	452		363
	453	BAS	325
	454	AI	471
	455		472
SSSWD	470		
	471		
	472	SSWD	583
	473		587
SSWD	470		
	471		
	472		584
	473		587
	474		